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ARABIC GLASS WEIGHTS.

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CATALOGUE

OF

ARABIC GLASS WEIGHTS

IN THE

BRITISH MUSEUM.

BY

STANLEY LANE-POOLE.

EDITED BY

REGINALD STUART POOLE, LL.D.
CORRESPONDENT OF THE INSTITUTE OF FRANCE.

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EDITOR'S PREFACE.

This Catalogue of the Glass Weights with Arabic inscriptions in the British Museum forms a supplementary volume to the Catalogue of Oriental Coins, with which it is essentially connected, inasmuch as the majority of the glass weights were clearly used to test the accuracy of the weight of coins.

Arabic Glass Weights are preserved separately in the Department of Coins and Medals, and in that of Mediæval Antiquities; but the contents of both departments have been included in this volume, with distinguishing letters.

The diameter and weight of each specimen (except when broken) are given in English inches and grains. Tables for converting inches into millimètres and the measures of Mionnet's scale, and grains into grammes, are supplied at the end of the volume.

The Catalogue is illustrated by nine autotype photographic plates.

The author is Mr. Stanley Lane-Poole; and I have carefully compared each weight with the corresponding description.

REGINALD STUART POOLE.

AUTHOR'S INTRODUCTION.

MANY of the coin cabinets of Europe contain a few glass discs, closely resembling Arabic coins in size, weight, and inscriptions. This resemblance has induced most numismatists to classify them as glass coins, *nummi vitrei, monnaies de verre*; and in my earliest contribution to the *Numismatic Chronicle* (xii. p. 199 ff., 1872) I endeavoured to support this view by various arguments derived from examples preserved in the British Museum. These arguments, however, were successfully combatted by the late E. T. Rogers (*Num. Chron.* N. S., xiii. p. 60, ff., 1873, and *Journal R. Asiatic Society*, N. S., x. p. 98, ff., 1878); and a further study of the glass discs themselves, as well as of the historical evidence, leads to the inevitable conclusion that they are nothing else but *standard weights* issued by the government of the day for the purpose, mainly, of testing the accuracy of current coins, but also occasionally destined for other uses.

The most distinct statement on this subject hitherto discovered in a trustworthy Arabic authority is that of El-Muḳaddesee, who, writing in A.D. 985, remarks in his *Maghrib* (i. 240), that the coins in use in the dominions of the Fáṭimee Khaleefeh are the deenár, and its fourth; the dirhem, half, quarter, eighth and sixteenth (kharroobeh or kharnoobeh) of the dirhem; all of which are accepted by number (not by weight); and he adds, "the weights for money are made of glass, and bear the same stamp as the ordinary raṭl [pound], namely the style of the [Fáṭimee] Prince of the Faithful."* This state-

* Prof. de Goeje, *Academy*, 26 Feb. 1876.

ment is sufficient to lay to rest any doubts as to the uses to which glass discs were put in Fátimee times; and it is corroborated by a passage in Ed-Demeeree's *Hayyát el-Heywán* (i. 80), where it is related how, when 'Abd-el-Melik, the Amawee Khaleefeh, inaugurated his purely Mohammadan coinage, he was advised, in order to secure uniformity in weight, to "cast weights of glass, which cannot alter either by increase or by decrease." These appear to be the only references to glass standard weights for testing coins hitherto noticed in the works of Arabic writers. Ibn-el-Atheer, indeed, mentions weights for testing coins (*Kámil*, iv. 337), but does not state of what material they were made.

The evidence of the weights themselves points unmistakeably to their relation to coins as standards of accuracy. Granting this special purpose, we should expect to find the glass discs tallying in weight with the various denominations of coins in circulation at the period to which they belong, and further to find their weight fairly uniform and constant for each denomination. This is precisely what we do find, as an examination of the following table of the glass weights in the British Museum collection will demonstrate:—

TABLE OF WEIGHTS OF GLASS.

(Numerals in thick type indicate that the denomination is specified on the glass weight; the rest are classified by analogy.)

I. *Under the Amawee and 'Abbásee Khaleefehs, chiefly 2nd century* A.H.

For Gold Coins.			*For Silver Coins.*			*Fels.*
Deenár.	½ Deenár.	⅓ Deenár.	Double Dirhem.*	Dirhem.	½ Dirhem.	
65	**33**	**22**	88	**44**	**19**	**58**
66	**33**	**22**	89	**38**†		**90** of 30 kharr.
						,, ,, ,,
66	**33**	**22**	76	**46**		**90** (*great fels*) ,,
66	**33**	**22**	93	**41**†		**56** of 20 ḳeeráṭs.
						82 of 19 [? 29] kh.
65	**33**	**22**	93	**45**		**111**
66	**33**	22	94	44		**89** of 33 kharr.
						97 of 32 ,,
66	**33**	22	89	46		**79** of 30 ḳeeráṭs.
66	**33**		93	46		**90**
						89
66	**33**			46		**76** of 25 ḳeeráṭs.
63	**33**			46		**76** ,, ,,
						63 of 20 kharr.
65	**33**			46		**49** of 15 ,,
65	**33**			47		**47** ,, ,,
						37 of 14 ḳeeráṭs.
67						**27** ½ fels of 9 ḳeeráṭs.
61						**27** ,, ,,

* These double dirhem weights all belong to late 'Abbásee Khaleefehs, *circ.* 600 A.H.

† Stated to consist of 13 kharroobehs. Cp. *l*, *infra*, p. xxvii.

II. *Under the Fáṭimee Khaleefehs, 4th to 6th centuries* A.H.

For Gold Coins.		
Double Deenár.	Deenár.	¼ Deenár.
131	62	15
132	65	16
132	65	15
131	63	16
130	61	16
126	61	16
131	58	15
132	65	14
	65	
	65	
	65	
	66	
	65	
	65	
	65	
	66	
	65	
	66	
	66	
	65	
	60	
	64	
	66	

For Silver Coins.

Double Dirhem.	Dirhem.	½ Dirhem.	¼ Dirhem.	Double Dirhem. (*continued.*)	Dirhem. (*continued.*)
90	45	22	11	84	46
88	42	22	11	92	46
92	44	22	11	92	43
91	44	23	11	91	40
91	45	23	11	92	46
92	41	20	11	92	46
92	46	18	11	92	45
90	45	24	11	92	45
92	43	23	10	83	45
92	47	18	12	94	41
92	46	23	11	90	45
87	45	23	11	91	36
91	45	22	11	90	32
90	46	23	11	92	37
77	46	21	11	90	47
91	45	23	11	92	47
90	46	23	12	90	47
91	47	23	12	89	46
91	46	23	11	91	46
91	46	23	11	92	45
86	44	22	11	90	45
83	45	20	12		47
93	46	23	10		40
92	46	22	11		47
81	46	23			46
80	45	23			50
92	46	22			46
92	46	23			47
86	46	24			47
80	46	21			46
90	46	21			44
90	46	23			46
91	46	22			46
92	46	23			46
91	46	22			46
92	45	22			
93	46	21			
92	46	23			
92	46	22			
84	42	21			
89	41	22			
86	47	22			
92	47	22			

The foregoing table includes all the weights in the Museum series, with the exception of broken fragments, which possess no metrological value, and seven irregular weights. It is remarkable that in a series of about 320 glass weights for deenárs and dirhems and their subdivisions and multiples (the fels will be discussed later), only seven should depart notably from the uniform standard.* The remainder are singularly uniform, when it is remembered that it is not very easy to cast glass exactly to a grain in weight, or to modify the weight after it has hardened. The early weights bear the indication of the denomination of coin which they are intended to test; as *deenár*, *naṣf deenár*, *dirhem*, &c. The long series of Fáṭimee weights carry no such indication, but when classed according to the standard established by the earlier weights, they show almost equal uniformity and exactitude. Thus the deenár is seen to weigh 66 grs. Troy. In only one instance does it touch 67 grs., and only once falls to 58. Out of 37 specimens, 28 weigh 66 or 65 grs. The half-deenár weighs uniformly 33 grs.; the third, 22 grs.; the quarter, 15 or 16 grs.; and the double deenár, 131 or 132, only one falling to 126. Taking 66 as the standard weight of the deenár, the other denominations are seen to agree: the double ought to be, and is, 132; the half, 33; the third, 22; and the quarter, 16½ (the glass weight here falls slightly short).† Again, the dirhem, as shown by 90 examples in glass, weighs 45 to 46 grs. Two-thirds of the 90 exhibit one or other of these weights; of the

* These seven weigh 218, 118, 116, 29, 17, 8, and 6 grs. The last two may represent the *thumn* or ⅛th of a deenár referred to by El-Muḳaddesee. The 17 may be an excessive ¼ deenár, the 29 a defective ½ deenár, and so on.

† A unique glass weight published by Rogers is stated in its inscription to represent a "dirhem, two-thirds" (ثلثين) of a deenár; wt. 11 grs. (*e*, *infra*, p. xxvi.).

remaining 30, 12 attain to 47 grs., only one exceeds 47 grs., and four fall below 40 grs. The double dirhem ought to be 91 to 92 grs., and out of 64 Fáṭimee specimens 35 weigh 91 to 92 grs., and 51 range from 89 to 94 grs. (The eight 'Abbásee double-dirhems are less regular, but they average a minute fraction under 90 grs.) The half-dirhem should be 22½ or 23 grs., and of 44 specimens, 32 weigh 22 to 23 grs., and only three fall below 20. The quarter-dirhem should weigh 11 or 11½ grs., and with the exception of two of 10 grs. the 24 examples in the Museum all weigh from 11 to 12 grs. If we compare the weights recorded by Mr. Rogers in the articles referred to, we shall find that they tally very closely with those observed in the Museum collection. The accuracy of the glass discs as standard weights for deenárs and dirhems, as well as their doubles and subdivisions, may therefore be accepted as proved. That they correspond to the known weights of the deenárs and dirhems, &c., of their time is of course obvious to the numismatist.

The column headed *fels* demands careful consideration. The word *fels* does not necessarily imply a copper coin, though it was commonly used in this sense. It rather denotes any piece of money accepted *by weight*. It will be noticed that the fels is frequently stated in terms of so many *kharroobehs* or so many *ḳeeráṭs*. According to the authorities cited by M. H. Sauvaire,* the *kharroobeh* seed weighs 3 grains of wheat, or 4 grains of barley; and 18 kharroobehs equal the dirhem in weight, and 24 the mithḳál (i.e. deenár). The *ḳeeráṭ* is equal to the kharroobeh, and runs 18 to the dirhem and 24 to the mithḳál, or according to others the proportions are 14 and 20. Taking the 15 fels in the Museum which state their

* *Matériaux pour servir à l'histoire de la numismatique et de la métrologie musulmanes*, pt. i., p. 106, pt. ii., p. 53.

weight in kharroobehs or ḳeeráṭs, and the solitary dirhem which gives its kharroobehs as 13, we arrive at the following conclusions:—

13	kharroobehs	=	38 grs.	or	1	kharroobeh	= (about)	3 grs.
15	,,	=	47 to 49 grs.	,,	1	,,	=	$3\frac{1}{6}$,,
20	,,	=	63	,,	1	,,	=	$3\frac{1}{3}$,,
30	,,	=	90	,,	1	,,	=	3 ,,
32	,,	=	97	,,	1	,,	=	3 ,,
33	,,	=	89	,,	1	,,	=	$2\frac{2}{3}$,,
143	kharroobehs	=	424	grs.	,, 1	,,	=	3 ,,

9	ḳeeráṭs	=	27 grs.	or	1	ḳeeráṭ	=	3 grs.
14	,,	=	37 ,,	,,	1	,,	=	$2\frac{3}{5}$,,
20	,,	=	56 ,,	,,	1	,,	=	$2\frac{4}{5}$,,
25	,,	=	76 ,,	,,	1	,,	=	3 ,,
30	,,	=	79 ,,	,,	1	,,	=	$2\frac{3}{5}$,,
98	,,	=	275 ,,	,,	1	,,	=	$2\frac{7}{10}$,,

From this it appears that the kharroobeh and the ḳeeráṭ are practically equivalent, and their value may be taken as 3 grs. *in Egypt*: but their weight and proportion to the deenár and dirhem varied in different countries.*

The question at once arises, what coins, if any, were these weights intended to test? One is avowedly a dirhem of 13 kharroobehs—thus forming an exception to the general estimate of 18 kharroobehs to the dirhem.† The rest are termed in their inscriptions *fels*, *great fels*, or *half fels*. The fels (according to these examples) weighs anything from 37 to 97 grs.: the "great fels" 90 grs., and the half fels 27 grs. It is obvious that the denomination counts for nothing, and that the number of kharroobehs or ḳeeráṭs stated in the inscription is the real standard of weight. What then was to be tested with these glass

* Rogers published a fels of 33 kharroobehs, wt. 99; another of 30 kharroobehs, wt. 90, both of which exactly agree with the British Museum figures; and a fragment of 27 kharroobehs (Cf. below, p. xxviii.)

† Cp. *l*, p. xxvii., below. This estimate does not tally with the average weight of an unworn dirhem—about 46 grs.; 15 or 16 kharroobehs would be nearer the mark.

weights of so many ḳeeráṭs or kharroobehs? Not deenárs or dirhems, since only two or three of these weights approximate the standards of deenárs and dirhems; moreover, these coins have standard glass weights of their own, specified as such. Again, testing an individual copper coin or fels by these standard weights would be useless, since the fels is very variable in weight, generally much worn and clipped, and sometimes intentionally cut into quarters. The fels, moreover, was usually passed by weight, not by number; and one is forced to the conclusion that these glass standards were used by the merchant to test the weight in copper of a certain number of *fuloos*, when offered for goods. This theory would account for the numerous varieties of weight employed, as indicated by the figures 9, 14, 15, 20, 25, 27, 30, 32, 33, kharroobehs or ḳeeráṭs. The merchant is selling, let us suppose, a piece of cloth for two dirhems and a half, and the buyer has no half-dirhem, but tenders copper fuloos instead. These fuloos are of varying size and weight, but the proportion of copper in kharroobehs to the dirhem at the given time is of course known, and the merchant would proceed to weigh the required number of fuloos by his standard glass weight of so many kharroobehs.

Besides coin weights, the British Museum possesses a few heavier glass weights which represent the pound (raṭl) and ounce (wuḳeeyeh), and were perhaps used for weighing a number of coins collectively. Some of these are inscribed with their denominations: such are the *raṭleyn* or 2 pounds, 5670 grs. (but the specimen is broken); the raṭl or pound, 3240 grs. (also broken); the half-raṭl, 1200 grs. (also broken); the quarter-raṭl, 1144 grs.; the half-wuḳeeyeh or half ounce, 244 and 525 grs.; and the sixth of a wuḳeeyeh, 96 grs. The uninscribed discs weigh 171, 115, 111 grs.; a hollow green glass cylinder, closed at both ends, weighs 4900 grs.; a glass ring (perhaps merely an ornament)

3000 grs.; and a square block, with a central hole, 1460 grs. One weight has what appears to be the numeral ٢ (2) upon it, weight, 120 grs.; another has the letter ح, wt. 147 grs.; and a third bears the representation of a figure, seated cross-legged, wearing a turban, and holding a bottle in his right hand and a wine-cup in his left. We learn from M. Sauvaire (ii. 93) that the Egyptian raṭl (for this weight varied greatly in different countries) weighed 6912 grs. of corn, or contained 12 oz. (wuḳeeyeh). At this rate, the sixth of a wuḳeeyeh weight of 96 grs. is exactly right; the half-ounce of 244 grs. wants 44 grs. to be full weight;* the other half-ounce of 525 grs. is inexplicable; the quarter of a pound, 1144 grs. is also very short of weight. The broken weights must of course be disregarded. Of the uninscribed weights, those of 4900, 3000, and 1460 grs., may represent the raṭl *roomee*, the Ḥalab ounce, and the double ounce of the raṭl *fulfulee*.

The scarcity of large glass weights may be accounted for by the brittle nature of the material; for a large piece of glass is more likely to be broken than a small one, if accidentally dropped. But the great preponderance of small glass weights is probably due chiefly to the fact that glass was specially reserved for testing the weight of coins, whilst copper and other materials could more easily be employed for the heavier weights required for weighing merchandise. It is singular, however, that so many weights of the Fáṭimee period should represent dirhems and their sub-divisions, whilst Fáṭimee dirhems are very rare in comparison with deenárs; and one is forced to the conclusion that the silver coinage of the Fáṭimee Khaleefehs, in spite of its scarceness in modern collections, must originally have been very numerous.

* M. Sauvaire has a half-ounce glass weight of 235 grs., *infra*, p. xxvii.

A cursory examination of the inscriptions on glass weights shows that they were specially and almost exclusively used in Egypt. Only two specimens bear the names of places; one of these is Miṣr, which means the capital of Egypt, and the other is El-Manṣooreeyeh, a Tunisian city under the rule of the Egyptian sovereign. Almost all the names of governors and princes found on the weights indicate an Egyptian origin. Of forty-three weights bearing the names of governors under the Khaleefehs of Damascus and Baghdád, thirty-four indicate holders of office (governors, treasurers, &c.) in Egypt, one has the word Miṣr, and it is fair to assume that the other eight names, though not hitherto identified, were those of Egyptian officials. Eighteen weights present the names of 'Abbásee Khaleefehs, without any indication of locality: but it is noteworthy that they all belong to times when Egypt was under the rule of governors or princes who acknowledged the supremacy of the 'Abbásee Khaleefehs. So long as their rivals the Fáṭimees held Egypt, not a single glass weight appears with an 'Abbásee name: but as soon as Ṣaláḥ-ed-deen had restored the allegiance of Egypt to the 'Abbásees, the names of the Khaleefehs El-Mustaḍee and and En-Náṣir appear on the weights—a sufficient indication of their Egyptian origin. The great majority of glass weights bear the names of the Fáṭimee Khaleefehs: but none exhibits a Fáṭimee name or date prior to their conquest of Egypt. It may, therefore, be taken as proved that the use of glass weights as standards for testing coins was characteristic of Egypt, and, so far as can be proved, of Egypt alone. Had they been used elsewhere, the names of princes and governors, other than Egyptian, would surely have been found upon them. It may be added that the great majority of the glass weights in the British Museum were discovered in

Egypt, in the rubbish heaps round Cairo and Fusṭáṭ and elsewhere, largely by the industry of the Rev. Greville Chester.

In the present state of our knowledge any inquiry into the origin of this use of glass weights in Egypt would be premature. The manufacture of objects in glass was, of course, common among the ancient Egyptians, and the art was never neglected in later times. And, although specially characteristic of the period of Mohammadan rule in Egypt, glass weights of the Roman and Byzantine ages are not uncommon. The British Museum possesses nearly eighty of these older weights, which were undoubtedly manufactured in Egypt, where they were found, for the most part by the Rev. Greville Chester. The Byzantine glass weights conform fairly closely to the standard of the solidus of 68 grs., which was the origin of the Mohammadan deenár of 66 grs. The figures run, approximately, 64, 65·7, 67·4, 67·7, 68·3, 69, 70·4; 32, 32·5, 33·4, 34, 34·4, 34·5, 34·9; 17·2, 17, 17·7, 18,—representing the solidus, half, and quarter, and very nearly the deenár, half, and quarter. The device on these weights is generally a bust or head, and some have inscriptions recording the name of the ruler of the province. That these are the direct ancestors of the Arabic glass weights is beyond question.

The older, Roman, glass discs present types obviously Egyptian—such as the figure of Harpocrates, Bes, Serapis, Isis, the ibis, the ram. Their weight, however, is not uniform like the Byzantine. Older still is the one Phoenician glass disc in the British Museum, bearing the words עבד כיר ('Abd Mar) in Phoenician round a bull's head, and weighing 11·8 grs. These various specimens carry the history of glass weights considerably further back than Mohammadan times. The Arabs found

Byzantine glass weights already in use in Egypt when they conquered it, and these were doubtless derived from earlier Roman discs, and from the glass scarabs of the Ptolemaic period.*

The inscriptions on glass weights are generally brief; for the reason that the letters are necessarily coarse; since great fineness in the lines is difficult in a material run into a mould. The formula بسم الله, *In God's name*, sometimes begins the inscription, and the words امر به or مما امر به (Such a one) *ordered*, or *Of what* (such a one) *ordered*, frequently precede the name of the governor or khaleefeh. In the time of the Fáṭimees, مما عمل, *of what was made*, is substituted. Instead of the verb ضرب, *strike*, طبع, *stamp* or *impress*, is used, in the phrase امر بطبعه (Such a one) *ordered the stamping of it* and the like. If a lower official, such as a sub-governor or inspector of markets, is indicated as well as the chief governor, his name is prefixed with the words على يدى, *by the hands* (of so-and-so). The object of the disc, as a mean of testing the weight of coins, is indicated by the word مثقال *weight*, prefixed to the denomination which it is intended to test; as مثقال دينر, *weight of a deenár*. In a few instances وزن, which has the same meaning, is substituted for مثقال, and rarely كيل, *measure;* whilst such forms as طبع بموزين, *stamped by weights*, and امر بميزن (Such a one) *ordered for weighing* (such a coin) occur: the alif of prolongation in such words as ميزان, موازين, دينار, being usually omitted.

The accuracy of the weight is attested by the word واف, *full* (weight); or, rarely, by كمل, ملة or كامل, and صح, which have equivalent meanings; or, especially under the Fáṭimee Khaleefehs, by عدل, *just* (weight).

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* See the notes of Mr. W. Flinders Petrie in the *Archaeological Journal*, vol. xl., p. 419, 1883.

The denominations of coins and weights indicated on the glass standards are,—

ثلث *third* (of a deenár).

ثلثين *two thirds* (of a deenár).

خرّوبة *kharroobeh*. The plur. خرّوبات also occurs.

درهم *dirhem*.

دينار, ديناز, *deenár*.

رطل *pound*. رطل كبير *great pound*. رطلين *two pounds*.

سدس *sixth* (of an ounce).

فلس *fels*. فلس الكبير *great fels*.

قيراط *keerát*. The plur. قرريط also occurs.

نصف *half* (of a dirhem, deenár, pound, fels, and ounce).

وقيّة *ounce*.

The names of the rulers under whose authority the weight was issued are chiefly (1) those of governors of Egypt under the Amawee and 'Abbásee Khaleefehs, with the style (if any) of *Ameer*, and rarely with the name of the contemporary Khaleefeh; (2) a few with the names and styles of the 'Abbásee Khaleefehs, without those of subordinate princes or governors; (3) those of the Fáṭimee Khaleefehs, whose titles are precisely the same as those occurring on their coins; and (4) those issued during the Memlook government of Egypt, and bearing names not identified hitherto with any of the known rulers or officers of the period. Such names are 'Alee Esh-Shuweykh ("the little Sheykh"), 'Alee El-Miṣree ("the Egyptian"), 'Alee Ed-Da'ee ("the emissary"), Moḥammad El-'Oodee ("the lutist"), Moḥammad El-Bábá, Aḥmad, 'Omar El-Faḳeeh ("the jurist"), 'Omar, Ḥasan, Ya'ḳoob, El-Jemálee, Aboo-Bekr, Faraj, &c. These persons were apparently private individuals, and their weights may have been stamped for their own shops. In some cases, however, they appear to have manufactured them themselves, for the phrases عمل عمر, *'Omar made it*, عمل

عمل برسم المسعودى احمد *, عمل فرج, حسن clearly indicate personal manufacture. It is noteworthy that, with the exception of the Khaleefehs, no Egyptian sovereigns' names appear on glass weights, neither of the Benee-Ṭooloon, the Ikhsheedees, the Ayyoobees, or the Memlooks. No obvious explanation of this circumstance suggests itself. It can hardly be assumed that all the glass weights issued by these dynasties have disappeared, and the only conclusion to arrive at is that they were not issued by them; but why they should not have been issued, and why glass weights appear in so sporadic a manner, are questions to which at present no answer seems to be forthcoming.

Benedictory phrases in connexion with the names of princes and governors are rare on glass weights. Those that occur are امتع الله به and امتع الله له, *God preserve him;* اكرمه الله, *God honour him;* اعزه الله, *God exalt him.* Other religious phrases are يثق بالله (Such a one) *trusts in God;* حسبى الله, *God suffices me;* ربى الله, *God is my Lord;* امر الله بالوفى, *God ordains honesty* (or just dealing); كيل الله, *God's measure;* نعم الرفيق التوفيق, *How excellent a companion is the grace of God;* استجرت بالله تعالى, *I seek the protection of God the most High;* لله, *To God;* العزة لله *To God* (belongeth) *power;* الله احد, *God is One;* انصر الله, *God grant victory.* Some of the discs bearing simply a formula such as the last may be in the nature of charms or medals. The 'Alawee *kelimah*, with على ولى الله, occurs on some Fáṭimee weights.

The colour of each glass weight is stated in the Catalogue, but it is impossible to describe the great variety of tints, ranging from deep purple or blue to pale yellow, which are exhibited. Some examples have a

* This can hardly refer to Sultán Faraj, the Memlook.

metallic lustre, some are gilded, some have striae of a different colour from the ground tint; and while the great majority are transparent or translucent, some are opaque. The commonest colour is bottle green.

Closely allied to glass weights are the curious glass stamps, indicating measures of capacity, of which a few are described at the end of this volume. They are known as *Bottle Stamps*, because they were impressed upon glass measures of bottle form. Very few of them have come down to us. The five in the British Museum are evidently Egyptian, for they are precisely similar to the glass weights of the same period, and three of them bear the names of Egyptian governors of whom we also possess glass weights,—namely, 'Obeyd-Allah ibn El-Ḥabḥáb and 'Eesá ibn Abee-'Aṭá.

The first in order bears the name of 'Abd-El-Melik ibn Marwán, who may be either the Amawee Khaleefeh, A.H. 65—86, or the governor of Egypt of the same name (A.H. 132). In form of inscription this stamp exactly tallies with the early glass weights; but instead of an indication of some denomination of coin, or weight, it bears the words نصف قسط *half a ḳisṭ*. The ḳisṭ, which is simply the Greek ξέστης, the Latin *sextarius*, a well known liquid measure of antiquity, was used by the Arabs as a measure for oil, wine, honey, and the like, and contained 18 (Arab) oz. of oil, or 20 of wine, or 27 of honey, by weight, according to Mar Eliyá the Archbishop of Naṣeebeen (*J. R. A. S.* ix., 291 ff. The various estimates of this measure may be referred to in Sauvaire, *Matériaux*, pt. iii., pp. 99, 198.)

The second stamp was issued by 'Obeyd-Allah ibn El-Ḥabḥáb, treasurer of Egypt at the beginning of the second century of the Flight (see the glass weights nos. 3, 3 G.), and bears also the name of a subordinate official, Haleem (?) ibn Meysarah and the date 111 A.H.: it indicates a quarter of a ḳisṭ, or about half a pint measure.

Rogers, who described this stamp in the *Journal of the Royal Asiatic Society* (x. p. 99, 1878), observed that "the inscription and the marginal rim were produced from two different moulds," and believed "that the former was first impressed, and that, before the glass had time to cool, the mould of the latter was pressed over it," with the effect of partially obliterating some of the letters.

The third and fourth bottle-stamps bear the name of 'Eesá ibn Abee-'Aṭá, who also issued the glass weight no. 6, and indicate the measure of half a ḳisṭ; while the fifth was made by a certain Ḥoseyn ibn 'Alee, unknown, and gives no indication of measure.

Rogers has also described (*J. R. A. S.*, *ibid.* pp. 100 and 111) four other bottle-stamps, not in the British Museum. One belonged to Lord Talbot de Malahide, and bears the inscription,—

امر حيان بن	*Ordered Ḥayyán ibn*
شريح ربـــع	*Shureyḥ: quarter*
قسط [illegible] و	*ḳisṭ . . . F-*
اف ٩	*ull measure.*

Rogers was unable to identify the name, which is that of the same governor of Egypt (A.H. 99—101) who issued no. 1 of the series of glass weights in the Museum collection. Another has the name of the Ḳáid 'Obeyd-Alláh, but the measure it represents is doubtful, and Rogers gives no engraving by which to correct his uncertain reading of the inscription:—

بسم الله امر القائد | عبيد الله | مكيلة شفر | فه واف.

A third stamp, belonging to the Rogers' collection, is inscribed,—

بسم الله	*In God's name*
امـــر الامـير	*ordered the Amcer*
محمد بن بشر (؟)	*Moḥammad ibn Bishr* (?)
نـــصف قسط	*Half ḳisṭ*
واف	*Full measure.*

And a fourth, belonging to Yakub Pasha Artin, reads,—

مما امر	*Of those ordered*
به عبيد الله	*by 'Obeyd Allah*
بن الحبحاب	*ibn El-Ḥabḥáb.*
قسط وا	*ḳisṭ. Full*
ف	*measure.*

The Department of Mediæval Antiquities possesses a series of copper stamps analogous to the glass bottle-stamps, but these do not come within the scope of the present Catalogue. Several of them bear the names of the 'Abbásee Khaleefehs El-Mo'temid, El-Mo'taḍid, and El-Muḳtedir, ranging from A.H. 256 to A.H. 320 (A.D. 870—932), together with the names of the Benee Abee-Dulaf of Karaj, Iṣfahán, &c.; viz., 'Abd-el-'Azeez, Dulaf, Aḥmad, and 'Omar, all ruling between 240 and 290 A.H.

In conclusion, I have specially to thank Mr. Herbert Grueber for much useful assistance, and Monsieur Sauvaire for some valuable notes on the Egyptian governors.

Athenæum Club.
June, 1891.

S. LANE-POOLE.

PUBLISHED GLASS WEIGHTS, NOT IN THE BRITISH MUSEUM.

1. GOVERNORS UNDER THE AMAWEE KHALEEFEHS.

Osámeh ibn-Zeyd. (See no. 2, p. 3.)

a. Half-deenár. As 2, but نصف دينر

(Castiglioni, but cp. Frähn, *Op. posth.* p. 150).

El-Ḳásim Ibn 'Obeyd-Alláh (see p. 5): A.H. 116.

b. Third of deenár. امر الله بالوفا وامر بطبعه مثقال ثلث القاسم بن عبيد الله على يدى .... بن سيف [؟] ستة عشرة

Wt. 22 grs. (Collection of H. Sauvaire. E. T. Rogers, *Num. Chron.* xiii., p. 76, 1873.)

(Rogers reads سنة instead of ستة; but El-Ḳásim was not appointed to the Treasury of Egypt before A.H. 112.)

Ḥafṣ ibn El-Weleed.

Treasurer of Egypt, A.H. 124–5, 127 = A.D. 742–5.

c. Deenár.

بسم الله	*In God's name:*
امر الله بالو	*God ordained hon-*
فا وامر الامير	*esty. And ordered the Ameer*
حفص بن الوليد	*Ḥafṣ ibn El-Weleed*
بطبعه مثقال دينر	*the stamping of it; weight of deenár.*
واف على يدى يز	*Full weight. By the hands of Yez-*
يد بن	*eed ibn .....*

Wt. 65 grs. (E. T. Rogers, *J. R. A. S.*, x, p. 108).

d. Third of deenár.

Same as preceding; but lowest lines

بطبعه مثقال	*the stamping of it: weight*
ثلث دينر وا	*of a third of deenár, full*
ف . . .	*weight* . . . . .

Wt. 22 grs. (E. T. Rogers, *ibid.*)

---

2. GOVERNORS UNDER THE EARLY 'ABBÁSEE KHALEEFEHS.

Yezeed ibn Ḥátim (see nos. 14-16): A.H. 144–152.

e. Dirhem, two-thirds of deenár.

بسم الله امر	*In God's name. Ordered*
الامير يزيد بن حاتم	*the Ameer Yezeed ibn Ḥátim*
مثقال درهم	*weight of a dirhem:*
ثلثين واف	*two thirds* [of a deenár]. *Full weight.*

Wt. 44 grs. (Collection of H. C. Kay. E. T. Rogers, *J. R. A. S.*, x, p. 106).

Ṣáliḥ ibn ('Eesá). (See no. 25G.)

f. Half-deenár.

Round central star,

بسم الله مثقال نصف دينر

Rev. على يدى صالح بن سيف [عيسى ؟]

Wt. 32 grs. (E. T. Rogers, *Num. Chron.* xiii, p. 68, 1873).

---

3. EARLY ANONYMOUS WEIGHTS.

g. Half-ounce. نصف وقية

Wt. 235 grs. Collection of H. Sauvaire, (Rogers, *Num. Chron.* xiii, p. 88, 1873).

h. Deenár.

طـــبع الـــد	*Stamped was the d-*
ينـر سنـة ست	*eenár year six*
وتسعين	*and ninety.*

Wt. 65 grs. (E. T. Rogers, *J. R. A. S.*, x, p. 107).

This is the earliest *dated* glass weight yet published.

i. Half-deenár.

بسم الله ضرب [؟] هذا النصف سنة مة

In God's name: this half was struck [?], *year* 100.

(Von Bergmann, *Die Nominale, u.s.w.* Num. Zeitsch.)

k. Half-deenár.

مثقال نصف واف

Weight of a half. Full weight.

Wt. 33 grs. (Von Bergmann, *ibid.*)

l. Dirhem.

بسم الله	*In God's name:*
مـــثـــقـــال	*Weight of*
درهـــــــم	*a dirhem*
وزن ثلث عشر	*weighing* 13
ة خروبة	*kharroobehs.*

Wt. 38 grs. (E. T. Rogers, *Num. Chron.* xiii, p. 68, 1873).

m. Fels of thirty-three kharroobehs.

مثقال فلس ثلث وثلثين خروبة

Weight of a fels of thirty-three kharroobehs.

Wt. 99 grs. (E. T. Rogers, *J. R. A. S.*, x, p. 103).

n. Fels of thirty kharroobehs.

عمر مثقال فلس ثلثين خروبة

'Omar, weight of a fels of thirty kharroobehs.

Wt. 90 grs. (E. T. Rogers, *J. R. A. S.*, x, p. 104).

o. Twenty-seven kharroobehs.

سبعة وعشرين خروبة .....

Fragment. (E. T. Rogers, *Num. Chron.* xiii, p. 68, 1873).

---

4. 'ABBÁSEE KHALEEFEHS.

El-Muḳtedir, A.H. 295–320 = A.D. 908–932.

p. Third of deenár.

بسم الله	*In God's name.*
امر المقـــتدر	*Ordered El-Muḳtedir*
امير المومنين	*Prince of the Faithful:*
مثقال ثلث	*Weight of a third.*
واف	*Full weight.*

Wt. 22 grs. (E. T. Rogers, *J. R. A. S.*, x, p. 109).

TABLE

OF THE

METHOD OF TRANSLITERATION ADOPTED IN THIS CATALOGUE.

ا	*a,*	ظ	*ẓh*
ب	*b*	ع	*'ạ*
ت	*t*	غ	*gh*
ث	*th*	ف	*f*
ج	*j*	ق	*ḳ*
ح	*ḥ*	ك	*k*
خ	*kh*	ل	*l*
د	*d*	م	*m*
ذ	*dh*	ن	*n*
ر	*r*	ه	*h*
ز	*z*	و	*w*
س	*s*	ى	*y*
ش	*sh*	ـَ *a, e*	ـَا *á*
ص	*ṣ*	ـِ *i*	ـِى *ee*
ض	*ḍ* (*ẓ*)	ـُ *u*	ـُو *oo*
ط	*ṭ*	ـَى *ay, ey*	ـَو *aw, ó*

ERRATA.

p. 20, no. 28 a., *dele* reference to Pl. II.

p. 63, no. 185, *read* ست or ثنين (?), 476 or 472.

p. 89, nos. 370 and 372, *dele* references to Pl. VIII.

p. 97, no. 391. *For* استحرب *read* استجرت, and translate,
I seek the protection of God the Most High.

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I.—GOVERNORS UNDER THE AMAWEE AND 'ABBÁSEE KHALEEFEHS.

NOTE.

When the nature of the Arabic inscriptions is sufficiently indicated by the name, etc., set forth in the heading, no detailed translation is given, in accordance with the system adopted in the *Catalogue of Oriental Coins;* but in the case of the inscriptions on the glass weights of the early Governors, where some metrological data, interesting to others besides Arabic scholars, are found, literal translations are added. Most of the weights are stamped on only one side: in this case the words *obv.* and *rev.* are omitted. The colour of the glass is given approximately, as the shades are too numerous to be individualized, and the attempt to distinguish them would rarely convey the same impression to two minds. They are always understood to be transparent except when stated to be opaque. The inscriptions are generally in a circular depression; when otherwise the form of the depression is stated. G. C. indicates that the specimen belongs to the Glass Collection in the Department of Mediaeval Antiquities, and not to the Department of Coins.

1.—GOVERNORS UNDER THE AMAWEE KHALEEFEHS.

ḤAYYÁN IBN SHUREYḤ.

Treasurer of Egypt, A.H. 99—101=A.D. 717—719.

DEENÁR.

1.

*	
امر حيان	*Ordered Ḥayyán*
بن شريح	*ibn Shureyḥ.*
مثقال دينر	*Weight of deenár.*
واف	*Full weight.*

Pl. I. Green, 1·15, Wt. 65

OSÁMAH IBN ZEYD.

Governor of Egypt, A.H. 102*=A.D. 720.

HALF-DEENÁR.

2.

امر اسا	*Ordered Osá-*
مة بن زيد	*meh ibn Zeyd*
بميزن نصف	*for the weighing of half*
دينر واف	*a deenár. Full weight.*

Pl. I. Green, ·85, Wt. 33

* So Ibn-el-Atheer, v. 77: but not Wüstenfeld.

'OBEYD-ALLÁH IBN EL-ḤABḤÁB.*

Treasurer of Egypt, A.H. 102—114=A.D. 720—732.

FELS.

Year 110.

3.

بسم الله	*In God's name:*
امر عبيد الله	*Ordered 'Obeyd-Alláh.*
مثقال فلس	*Weight of fels.*
سنة عشر	*Year ten*
مائة	*a hundred.*

Pl. I. Green, ·95, Wt. 58

THIRD OF DEENÁR.

30.

بسم الله	*In God's name:*
امر عبيد ا	*Ordered 'Obeyd-A-*
لله ابن الحبحا	*llah ibn El-Ḥabḥá-*
ب مثقال ثلث	*b. Weight of a third.*
واف	*Full weight.*

G. C. Green, ·8, Wt. 22

* See bottle stamps in Appendix.

EL-ḲÁSIM IBN 'OBEYD-ALLÁH.

Treasurer of Egypt, A.H. 112—124 = A.D. 730—741.

(UNDER WHOM MUSLIM IBN EL-'ÁFEE.)

FELS: THIRTY KHARROOBEHS.

Year 119.

4.

بسم الله ا	*In God's name:*
مر الله بالوفى	*God commands honesty;*
وامر بطبعه	*and the stamping of it ordered*
مثقال فلس ثلثين	*[as] the weight of a fels of thirty*
خروبة القاسم	*kharroobehs El-Ḳásim*
بن عبيد الله على يدى	*ibn 'Obeyd-Alláh; by the hands*
مسلم بن العا	*of Muslim ibn El-'Á-*
ف سنة تسع	*fee: year nine-*
عشرة ومـا	*teen and one hund-*
ية	*red.*

Pl. I. Green, 1·3, Wt. 90

EL-ḲÁSIM IBN 'OBEYD-ALLÁH.

GREAT FELS: THIRTY KHARROOBEHS.

Year 119.

5.

بسم الله	*In God's name:*
مما امر به ؛	*of what ordered E-*
لقاسم بن عبيد	*l-Ḳásim ibn 'Obeyd-*
الله مثقال فلس	*Alláh: weight of fels,*
الكبير ثلثين خر	*the great, of thirty khar-*
وبة وا	*roobehs. Full*
ف	*weight.*

Pl. I. Green, 1·3, Wt. 90

'EESÁ IBN ABEE-'AṬÁ.*

Treasurer of Egypt, A.H. 125—127, 128—132, = A.D. 743—745, 745-749.

(UNDER WHOM YEZEED IBN ABEE-YEZEED.)

DIRHEM.

6.

بسم الله ا	*In God's name:*
مر الله بالوفا وا	*God commands honesty: and*
مر عيسى بن ابى عطا	*'Eesá ibn Abee-'Aṭá ordered*
بطبعه مثقال درهم	*the stamping of it: weight of a dirhem;*
على يدى يزيد بن ابى	*by the hands of Yezeed ibn Abee-*
يزيد	*Yezeed.*

Pl. I. Green, 1·0, Wt. 44

* See bottle stamps in Appendix.

HALF-DEENÁR.

6d.

بسم الله (*sic*)	*In God's name :*
امر عیسی بن ابی	*Ordered 'Eesá ibn Abee-*
عطا بطبعه وز	*'Aṭá the stamping of it : the weight*
ن نصف دینر علی	*of half a deenár; by*
یدی یزید بن	*the hands of Yezeed ibn*
ابی یزید	*Abee-Yezeed:*

Green, ·9, Wt. 33

YEZEED IBN ABEE-YEZEED.

FELS: TWENTY ḲEERÁṬS.

7.

امر یزید	*Ordered Yezeed*
بن ابی یزید	*ibn Abee-Yezeed.*
مثقال فلس	*Weight of a fels*
عشرین قیر	*of twenty ḳeerá-*
ط	*ṭs.*

Pl. I. Green, 1·05, Wt. 56

HALF-DEENÁR.

8.

امر يزيد بن	*Ordered Yezeed ibn*
ابى يزيد * وزن (؟)	*Abee-Yezeed. Weight*
نصف واف	*of a half. Full weight.*

Green, ·85, Wt. 33

HALF-DEENÁR.

9.

بسم الله	*In God's name :*
امر الله بالوفى	*God commands honesty.*
بطبعه مثقا	*Stamped, weight*
ل نصف على	*of a half. By*
يدى يزيد بن	*the hands of Yezeed ibn*
ا يزيد (*sic*)	*A[bee]-Yezeed.*

Pl. I. Green, ·85, Wt. 33

2.—GOVERNORS UNDER THE EARLY 'ABBÁSEE KHALEEFEHS.

'ABD-EL-MELIK IBN YEZEED.

Governor of Egypt, A.H. 133—6 and 137—141 = A.D. 751—753 and 754—758.

(UNDER WHOM MOḤAMMAD IBN.....)

DEENÁR.

10.

Obv.	بسم الله	*In God's name:*
	امر عبد ا	*Ordered 'Abd-e*
	لملك بن يزيد	*l-Melik ibn Yezeed*
	بمثقال دينر	*for the weight of a deenár.*
	واف	*Full weight.*
Rev.	In centre, طبعه	*struck*
	كمل؟	*accurate.*

Margin inverted, . . على يدى محمد بن عبد

By the hands of Moḥammad ibn . . . . .

Pl. I. Green, 1·15, Wt. 66

DIRHEM.

11.

Obv. within square,

بسم الله ا	*In God's name :*
مر عبد الملك	*Ordered 'Abd-El-Melik*
بن يزيد بمثقا	*ibn Yezeed for the weight*
ل درهـــم و	*of a dirhem ; weight*
زن ثلثة عشر	*of thirteen*
خروبة	*kharroobehs.*

Pl. I. Green, ·9, Wt. 38

NAWFAL IBN FURÁT.

Treasurer of Egypt, A.H. 141—143 = A.D. 758—760.

(UNDER WHOM ..... IBN YEZEED.)

FELS: NINETEEN KHARROOBEHS.

12.

امر نوفل بن	*Ordered Nawfal ibn*
فرات بطبعه	*Furát the stamping of it :*
مـوا فلس (*sic*)	*weight of fels*
تسعة وعشرة (*sic*)	*of nineteen*
خروبات	*kharroobehs.*

Pl. I. Green, 1·35, Wt. 82

HALF-DEENAR.

13.

Obv. امر نوفل *Ordered Nawfal*
بن فرات *ibn Furát*
بطبعه *the stamping:*
مثقال نصف *weight of half*
دينر واف *a deenar. Full weight.*

Rev. Centre, طبعه *Stamped*
كامل *accurate.*

Margin, ر بن يزيد . . . . . *ibn Yezeed.*

Pl. I. Green, ·9, Wt. 33

YEZEED IBN ḤÁTIM.

Governor of Egypt, A.H. 144—152 = A.D. 761—769.

(UNDER WHOM 'ABD-ER-RAḤMÁN IBN YEZEED.)

Interim Governor of Egypt, A.H. 147=A.D. 764.

DEENÁR.

14, 15.

Obv. بسم الله *In God's name:*
امر الامير *Ordered the Ameer*
يزيد بن حاتم *Yezeed ibn Ḥátim.*
مثقال دينر *Weight of deenár.*

Rev. Centre, طبعه *Stamped*
كمل *accurate.*

Margin, على يدى [عب]د الرحمن بن يزيد
By the hands of 'Abd-er-Raḥmán ibn Yezeed.

Pl. I. Green, 1·2, Wt. 66
Green, 1·15, Wt. 66

THIRD OF DEENÁR.

16, 17.

Same as 14: but مثقال ثلث *Weight of third.*
واف *Full weight.*

Pl. I. Green, ·75, Wt. 22
Green, ·75, Wt. 22

'ABD-ER-RAḤMÁN IBN YEZEED.

SIXTH OF OUNCE.

18.

Obv. Within square,
سدس *Sixth*
وقية *of ounce.*

Rev. Centre, طبعه *Stamped*
كمل *accurate.*

Margin, على يدى عبد الرحمن بن يزيد
By the hands of 'Abd-er-Raḥmán ibn Yezeed.

Pl. II. G. C. Green, 1·2, Wt. 96

MOḤAMMAD IBN SA'EED.

(UNDER WHOM SA'EED IBN EL-MUSEYYIB.)

Governor of Egypt, A.H. 152=A.D. 769.

DEENÁR.

19.

Obv.	بسم الله	*In God's name:*
	امر الامير	*ordered the Ameer*
	محمد بن سعيد	*Moḥammad ibn Sa'eed.*
	مثقال دينر	*Weight of deenár.*
Rev. Centre,	ضرب	*Stamped*
	بموزين	*by weight.*

Margin, بسم الله على يدى سعيد بن المسيب

In God's name: by the hands of Sa'eed ibn El-Museyyib.

Pl. II. Green (metallic lustre), 1·1, Wt. 65

UNDER THE KHALEEFEH EL-MAHDEE.

A.H. 158—169=A.D. 775—785.

EL-MOHÁJIR [IBN 'OTHMÁN].

Chief of the body-guard of Mohammad ibn El-Ash'ath, Governor of Egypt in A.H. 141*=A.D. 758.

(UNDER WHOM THE AMEER . . . . SMR.)

HALF-DEENÁR.

20.

Obv.	بسم الله	*In God's name:*
	المهدى امير	*El-Mahdee, Prince*
	المومنين مثقا	*of the Faithful. Weight*
	ل نصف و	*of half* [*deenár*]. *Full*
	اف	*weight.*
Rev.	Centre, طبعه ا	*stamped it*
	لمحا[جر	*El Mohájir.*

* *

Margin, على يدى الامير . . . . . سمر

By the hands of the Ameer . . . . . smr.

Pl. II. Green, ·85, Wt. 33

---

* It is not stated in the histories whether El-Mohájir was confirmed in office by El-Mahdee, but these weights prove that he was in authority under that Khaleefeh.

THIRD OF DEENÁR.

21.

Obv.	بسم الله	*In God's name :*
	امر المهدى ا	*Ordered El-Mahdee,*
	مير المومنين	*Prince of the Faithful.*
	مثقال ثلث	*Weight of a third* [*deenár*].
	واف	*Full weight.*
Rev.	Centre, طبعه ا	*Stamped* [*by*]
	لمهاجر	*El-Mohájir.*

Margin, على يدى ال . . . . . سمر

By the hands of the . . . . . smr.

Green, ·75, Wt. 22

22.

As 21 : reverse obliterated.

Green, ·75, Wt. 22

ISMÁ'EEL [IBN SÁLIḤ].

Moḥtesib of Miṣr under El-Mahdee, afterwards Governor of Egypt, A.H. 182, 3 = A.D. 798, 9.

DEENÁR.

23.

*

Obv.	بسم الله امر	*In God's name : Ordered*
	المهدى محمد	*El-Mahdee Mohammad,*
	امير المومنين	*Prince of the Faithful.*
	امتع الله له	*(God preserve him !)*
	مثقال دينر	*Weight of a deenár.*
	واف	*Full weight.*

Rev. Margin, بسم الله على يدى الامير اسمعيل

In God's name : by the hands of the Ameer Ismá'eel.

Centre, مـــلـــة *Full [weight].*

. .

Pl. II. Green, 1·1, Wt. 66

UNCERTAIN.

DEENÁR.

24, 24a.

Same as 23.

Green, 1 05, Wt. 66

Margin obscure. G. C. Green, 1·1, Wt. 66

IBRÁHEEM IBN ṢÁLIḤ.

Governor of Egypt, A.H. 165—7=A.D. 781—784.

HALF-DEENÁR.

25.

Obv.	بسم الله	*In God's name :*
	المهدى امير	*El-Mahdee, Prince*
	المومنين مثقا	*of the Faithful. Weight*
	ل نصف و	*of a half* [*deenár*]. *Full*
	اف	*weight.*
Margin,	ابرهيم	
	. . . . . *Ibráheem* . . .	
Rev. Centre,	صا	*Ṣá-*
	لح	*liḥ.*

Pl. II. Green, ·85, Wt. 33

(UNDER WHOM ṢALIḤ IBN 'EESÁ.)

POUND.

25G.

*	
مما امر به الامير	*Of what ordered the Ameer*
ابرهيم بن صالح ا	*Ibraheem ibn Ṣáliḥ : or-*
مر مثقال رطل ...	*dered* [*as*] *weight of a pound...*
على يدى صا[لح بن] عيسى	*by the hands of Ṣá*[*liḥ ibn*] *'Eesá.*

G. C. Brown. Originally in form of square with hole in centre, but broken. Wt. 3240

EL-FAḌL IBN ṢÁLIḤ.

Interim Governor of Egypt, A.H. 136=A.D. 753;
Governor, A.H. 169=A.D. 785.

(UNDER WHOM 'ÁṢIM IBN ḤAFṢ.)

DEENÁR.

26.

Obv. مما امر به الا — *Of what ordered the A-*
مير الفضل بن — *meer El-Faḍl ibn*
صلح اكرمه الله — *Ṣáliḥ (God honour him!)*
مثقال دينر واف — *Weight of a deenár. Full weight.*
*

Rev. Margin, على يدى عاصم بن — *By the hands of 'Áṣim ibn*
Centre, حفص — *Ḥafṣ.*
*

Pl. II. Yellow, 1·1, Wt. 66

'ÁṢIM IBN ḤAFṢ.

HALF-DEENÁR.

27.

Obv. بسم الله — *In God's name:*
مثقال نصف — *Weight of half-*
دينر واف — *deenár. Full weight.*
*

Rev. Margin, على يدى عاصم بن — *By the hands of 'Áṣim ibn*
Centre, حفص — *Ḥafṣ.*
• •

(partly obliterated).

Pl. II. Green, ·85, Wt. 33

ABOO-JA'FAR ASHNÁS.

Governor of Egypt, A.H. 219—230 = A.D. 834—844.

(UNDER WHOM MOḤAMMAD IBN . . .)

27G.

HALF-OUNCE.

Year 223.

مما امر به الامير ابو	*Of what ordered the Ameer Aboo-*
جعفر اشناس مولى	*Ja'far Ashnás, servant*
امير المومنين اعزه	*of the Prince of the Faithful, augment him*
الله على يدى الامير	*God; by the hands of the Ameer*
محمد بن بسطام ابو	*Moḥammad ibn . . . . . Aboo-*
وبحار مولى امير المو	*. . . . . servant of the Prince of the Faith-*
منين سنة ثلثة وعشر	*ful: in the year three and twen-*
ين وماتين نصف وقية	*ty and two hundred. Half an ounce.*

G. C. Pl. II. Green, 2·05, Wt. 525

3.—UNCERTAIN GOVERNORS.

'ABD-EL-'AZEEZ IBN ḤOMEYD.

HALF-DIRHEM.

28.

مما [ما] امر به	*Of what ordered*
عبد العزيز بن	*'Abd-el-'Azeez ibn*
حميد نصف	*Ḥomeyd. Half-*
درهم	*dirhem.*
(blundered.)	

Pl. II. Yellow, ·75, Wt. 19

AḤMAD IBN (JUBEYR?).

QUARTER-POUND.

28G.

مما امر به الا	*Of what ordered the A-*
مير احمد بن	*meer Aḥmad ibn*
جبير ربع ر	*Jubeyr* (?) : *quarter*
طل واف	*pound. Full weight.*

Pl. II. G. C. Green, 2·4, Wt. 1144

DIRHEM.

29.

Within square,

مما امر به الا	*Of what ordered the A-*
مير احمد بن ج	*meer Aḥmad ibn Ju-*
بير وزن در	*beyr* (?): *Weight of a dir-*
هـــم واف	*hem. Full weight.*

Pl. II. Green, ·95, Wt. 46

MOḤAMMAD IBN S....

HALF-DEENÁR.

Miṣr.

30.

Obv.	بسم اللـــه	*In God's name*:
	امـــر اميـــر ا	*Ordered the Prince of*
	لمومنين مثقال	*the Faithful. Weight*
	نـــصـــف واف	*of half* [*deenár*]. *Full weight.*

Rev. Centre, مـــصـــر *Miṣr.*

Margin, ... محمد بن سـ *Moḥammad ibn S. . . .*

Green, ·8, Wt. 33

JA'FAR IBN SULEYMÁN.

30G.

ں بالله ں	*In God*
جعفر بن سليمن	*Ja'far ibn Suleymán*
* يثق *	*trusts.*

Pl. II. G. C. Blue, 1·55, Wt. 171

'ALEE IBN MOḤAMMAD.

(UNDER WHOM IBRAHEEM ?)

[POUND?]

30Q.

مـــمـــا امـــر	*Of what ordered*
بـه الامـــيـــر	*the Ameer*
علی بن محمد	*'Alee ibn Moḥammad,*
امتـــع الـــله	*God preserve*
بـه واف علـی	*him. Full weight. By*
يـدی ابرهـيـم؟	*the hands of Ibraheem?*

G. C. Opaque Green coated with yellow, 3·45, Wt. 5350 (a small portion broken off.)

'OMAR.

THIRTY-TWO KHARROOBEHS.

31, 32.

عمر	*'Omar.*
اثنين وثلثين	*Two and thirty*
خروبة	*kharroobehs.*

Green, 1·25, Wt. 96

Pl. II. Green, 1·25, Wt. 96

MOḤAMMAD:

DIRHEM: THIRTEEN KHARROOBEHS.

33.

بسم الله	*In God's name:*
امر ا محمد	*Ordered Moḥammad.*
مثقال درهم	*Weight of dirhem*
ثلثة عشر خر	*of thirteen kharr-*
وبة واف	*oobehs. Full weight.*

Green, ·95, Wt. 41

[HALF-DEENÁR.]

34.

Obv. As 20: but مثقال in one line.

Rev. Centre, محمد ؟ *Moḥammad?*

Around, illegible inscription.

Straw, ·9, Wt. 33

34G.

محمد *Moḥammad.*

*

G. C. Brown, 1·25, Wt. 115

UNCERTAIN.

34K.

A.H. *xx*9.

Within square,

بسم الله *In God's name*

سوى . . . .?

سنة تسع *Year nine.*

G. C. Green, metallic lustre, 1·45, Wt. 111

II.—EARLY ANONYMOUS WEIGHTS.

II.—EARLY ANONYMOUS WEIGHTS.

TWO POUNDS.

34Q.

رطلين *Two pounds.*

*

G. C. Green, originally in form of square with hole in centre, but broken, Wt. 5670

HALF-POUND.

34T.

نصف *Half*

رطل *pound*

كبير *great.*

G C. Green, a rough square block, chipped, 1·7, Wt. 1200

HALF-OUNCE.

35.

Within square, نصف *Half*

وقية *ounce.*

Pl. III. Green, 1·5, Wt. 244

35*d*.

FELS

مثقال *Weight*

فلس *of fels.*

Green, 1·35, Wt. 111

FELS: THIRTY-THREE KHARROOBEHS.

36.

بسم الله	*In God's name:*
مثقال فلس	*Weight of fels of*
ثلاثة ثلثين	*three and thirty*
خروبة	*kharroobehs.*

Green, 1·15, Wt. 89

FELS: THIRTY-TWO KHARROOBEHS.

37, 37G.

Within square,

مثقال	*Weight*
فلس اثنين	*of fels of two*
وثلثين خر	*and thirty kharr-*
وبة	*oobehs.*

Pl. III. Green, 1·25, Wt. 97
G. C. ,, 1·25, Wt. 97

FELS: THIRTY ḲEERÁṬS.

38.

مثقال الفل	*Weight of the fel-*
س ثلثين قير	*s of thirty ḳeer-*
اط واف	*áṭs. Full weight.*

(Inscription reversed.)

Pl. III. Green, 1·5, Wt. 79

FELS: TWENTY-FIVE KHARROOBEHS.

39, 39G.

مثقال فلس	*Weight of fels:*
خمس وعشر	*of five and twen-*
ين خروبة	*ty kharroobehs.*

Fragment. Opaque Black, 1·15
G. C. ,, ,, 1·1

FELS.

40, 40a.

مثقال *Weight*
فلس *of fels.*
واف *Full weight.*

Green, 1·25, Wt. 90
G. C. „ 1·2, Wt. 89

FELS: TWENTY-FIVE KEERÁṬS.

41, 42.

مثقال فلس *Weight of fels:*
واف وزن *full weight: weight*
خمسة وعشر *of five and twen-*
ين قيرط *ty keeráṭs.*

Pl. III. Green, 1·15, Wt. 76
„ 1·15, Wt. 76

FELS: TWENTY-*x* KHARROOBEHS?

43.

بـ[سم الله *In God's name:*
مثقال فلس *Weight of fels*
. . . . و عشر *. . . and twen-*
وحرر (؟) *[ty] . . . .*

Fragment. Green, 1·1

FELS: TWENTY KHARROOBEHS.

44.

فلس *Fels of*
عشرين *twenty*
خروبة *kharroobehs.*
*

Pl. III. Green, 1·05, Wt. 63

DEENÁR.

45.

مثقال *Weight*
دينر *of deenár.*
واف *Full weight.*
* Green, ·95, Wt. 63

DEENÁR.

46.

بسم الله *In God's name:*
ربى الله *God is my Lord.*
دينار *Deenár.*

Pl. III. Green, ·95, Wt. 65

[DEENÁR.]

47.

بسم *In the name*
الله *of God.*
كيل *Measure*
الله *of God.*

Pl. III. Green, ·9, Wt. 65

[DEENÁR.]

48.

نعم *How good*
الرفيق *a companion [is*
التوفيق *God's] grace.*

Pl. III. Opaque Black, ·9, Wt. 67

FELS: FIFTEEN KHARROOBEHS.

49.

مثقال فلس *Weight of fels*
خمس عشر *of fifteen*
ة خروبة *kharroobehs.*

Pl. III. Green, 1·0 Wt 49

50.

Same as 48.

Green, ·9, Wt. 47

DIRHEM.

51.

Within square, درهم *Dirhem*
كيل *measure.**

Pl. III. Green, ·95, Wt. 45

FELS: FOURTEEN KEERÁṬS.

52.

مثقال فلس *Weight of fels:*
واف اربعة *full weight: four-*
عشر قيراط *teen keeráṭs.*

Pl. III. Opaque Black, ·9, Wt. 37

HALF-DEENÁR.

53.

In centre, star surrounded by dots.

Margin, بسم الله مثقال نصف دينر

In God's name: weight of half a deenár.

Pl. III. Green, ·9, Wt. 33

---

* I.e., *weight*. The verb كال is used for the weighing of coins. (Kámoos.)

[HALF-DEENÁR.]

54.

لله الله *To God: God is.*

لله احد *To God: One.*

Green, ·8, Wt. 33

HALF-FELS: NINE ḲEERÁṬS.

55, 55G.

* مثقال *Weight*

نصف فلس *of half a fels.*

تسعة وزن *Weight of nine*

* قرريـــط *ḳeeráṭs.*

Pl. III. Green, ·9, Wt. 27
G. C. „ ·9, Wt. 27

[THIRD OF DEENÁR.]

56.

بسم الله *In God's name:*

ربى الله *God is my Lord.*

* * *

Green, ·65, Wt. 22

56*d*.

Same as 47.

Green, ·75, Wt. 22

III.—'ABBÁSEE KHALEEFEHS

WITHOUT GOVERNORS' NAMES.

III.—'ABBÁSEE KHALEEFEHS.

II.—'ABD-ALLÁH EL-MANṢOOR.

A.H. 136—158 = A.D. 753—775.

DEENÁR.

57.

مما امر به	*Of what ordered*
عبد الله عبد	*the servant of God 'Abd-*
الله امير المو	*Allah, Prince of the Faith-*
منين مثقال د	*ful. Weight of d-*
ينر واف	*eenár. Full weight.*

Pl. III. Green, 1·65, Wt. 218

III. EL-MAHDEE BI-LLÁH.

A.H. 158—169=A.D. 775—785.

57*k*.

[DEENÁR]

*

مما امر به

الامام المهدى

بالله امير

المومنين

Green, 1·05, Wt. 61

XXXIII.—EL-MUSTAḍEE BI-AMRI-LLÁH.

A.H. 566—575 = A.D. 1170—1180.

[DOUBLE DIRHEM.]

58, 58*a*, 59, 59*a*

الله
الامـــام
المستضي
بامر

Pl. III. Opaque White, 1·1, Wt. 88
,, ,, 1·0, Wt. 89
,, ,, ·95, Wt. 76
G. C. ,, 1·05, Wt. 93

60.

Same as 58, apparently, but imperfectly run.

Opaque Turquoise Blue, 1·0, Wt. 93

61—63.

[DIRHEM.]

Same as 58.

Opaque White, ·9, Wt. 44
,, Green, ·8, Wt. 46

64.

Same as 58, omitting الامام.

Opaque White, ·8, Wt. 46

XXXIV.—EN-NÁṢIR LI-DEENI-LLÁH.

A.H. 575—622 = A.D. 1180—1225.

65, 66.

[DOUBLE DIRHEM]

الامـــام
الناصـــر
لدين له (*sic*)

Green, 1·1, Wt. 94
„ 1·05, Wt. 89

67.

—
الامـــام
الناصـــر
—

Opaque Green, 1·0, Wt. 93

68.

[DIRHEM.]

As 65.

Green, ·85, Wt. 46

69.

الله
الامام ناصر (*sic*)
لدين

Opaque Green, 9, Wt. 46

70.

الله
الامـــام
الناصـر
لدين

Pl. III. Opaque White, ·8, Wt.

71.

الله
لامـا النـا ا
م صر؟

Opaque White, ·85, Wt. 47

IV.—FAṬIMEE KHALEEFEHS.

IV.—FÁṬIMEE KHALEEFEHS.

IV.—EL-MO'IZZ MA'ADD.

A.H. 341—365 = A.D. 952—975.

[DEENÁR]

72.

El-Manṣooreeyeh.

Outer margin, بسم الله امر به عبد الله معد ابو تميم الامام

Inner margin, المعز لدين الله بالمنصورية

Centre, . . .

Pl. IV. Green, 1·1, Wt. 62

[DIRHEM.]

73.

Margin, الامام المعز لدين الله

Centre, point.

Pl. IV. Green, ·9, Wt. 45

[QUARTER-DEENÁR.]

74.

Same as 73: no point.

Purple, ·7, Wt. 15

V.—EL-'AZEEZ NEZÁR.

A.H. 365—386 = A.D. 975—996.

[DOUBLE DEENÁR.]

75.

Centre, عـــدل

Margin, الامام العزيز بالله امير المومنين

Pl. IV. Green, with metallic lustre, 1·3, Wt. 121

[DOUBLE DIRHEM.]

76.

Within octagon, الامام
العزيـز بـالله
امير المومنين
نـزار

Pl. IV. Yellow, 1·1, Wt. 91

77.

الامـام
نـــزار

Pl. IV. Blue, 1·05, Wt. 88

[DEENÁR.]

78.

مما امـر بـه
الامام العزيز
بـالله امـيـر
المـومـنـيـن

Pl. IV. Green, 1·1, Wt. 65

[HALF-DIRHEM.]

79.

Same as 77, but within square.

Pl. IV. Green, ·7, Wt. 22

80.

الامـــام

العزيـــز

Green, ·65, Wt. 22

81.

العزيـــز

[با]للـه

Fragment. Green, ·6

82.

بالله

العزيز

Green, ·45, Wt. 4

[HALF-DIRHEM.]

83.

Apparently same as 82: but obscure.

Opaque Black, ·55, Wt. 22

VI.—EL-ḤÁKIM EL-MANṢOOR.

A.H. 386—411 = A.D. 996—1020.

[DEENÁR.]

84, 85.

Year 403.

Obv.	لا اله الا الله	*There is no God but God :*
	محمد رسول الله	*Moḥammad is the Apostle of God,*
	على ولى الله	*'Alee is the Friend of God.*
Rev.	الامام الحاكم	*The Imám El-Ḥákim*
	بامر الله امير	*bi-amri-lláh, Prince*
	المومنين مما	*of the Faithful. Of what*
	عمل فى سنة	*was made in the year*
	ثلث واربع مائة	*three and four hundred.*
	عدل	*Just.*

Pl. IV. Green, 1·1, Wt. 65
Yellow, 1·1, Wt. 63

86.

Year 403.

As 84 : but obv. arranged as far as ولى in circular margin, with الله in centre.

Green, 1·1, Wt. 61

87.

Year 404.

As 84: but last lines of rev.,

عمل فى سنة اربع
واربع مائة
عدل

Green, 1·0, Wt. 61

88.

Year 406.

الامام الحاكم
بامر الله امير المومنين
مما عمل فى سنة ست
واربع مائة

Brown, coated with opaque yellow paste, ·95, Wt. 58

89.

(With name of 'Omar.)

Year 407.

Obv. As 84:

beneath, عمر

Rev. عدل الامام الحاكم بامر
الله امير المومنين وخليفة
ولى عهد المسلمين
مما عمل فى سنة سبع
واربع مائة

Pl. IV. Green, metallic lustre, 1·1, Wt. 65

90—93.

Year 409.

Obv. Centre, الامام الحاكم
بامر الله امير المومنين
وولى عهده

Margin, لا اله الا الله وحده لا شريك له محمد رسول الله
على ولى الله

Rev. . . . . .
مما عمل فى سنة
تسع واربع مائة

Pl. IV. *Chipped.* Green, 1·05, Wt. 65
„ 1·05, Wt. 65
Yellow, 1·05, Wt. 66
„ 1·1, Wt. 66

[DOUBLE-DIRHEM.]

94, 95.

Obv. Centre, عدل

Margin, لا اله الا الله محمد رسول الله على ولى الله

Rev. Centre, Star.

Margin, الحاكم بامر الله وولى عهده

Pl. IV. Green, 1·05, Wt. 92
„ 1·05, Wt. 91

96, 97.

Obv. As 84.

Rev. الحاكم بامر الله
وولى عـــهـــده

Pl. IV. Green, 1·1, Wt. 91
,, 1·05, Wt. 92

98.

Obv. As 96.

Rev. الحاكـــم
بامر الله
عدل

Pl. IV. Green, 1·1, Wt. 92

98G.

الحاكـــم
بامر الله

G. C. Green, 1·05, Wt. 90

99, 99G.

Obv. Inscr. obliterated.

Rev. الامام الحاكم
بامر الله وولى
عهده
. . .

Green, 1·05, Wt. 92
G. C. Brown, 1·0, Wt. 92

100.

Centre, حسبى *My sufficiency*
الله *is God.*

Margin, الامام الحاكم بامر الله امير المومنين

Blue, 1·05, Wt. 92

101.

الحاكم
بامر الله

Green, 1·0, Wt. 87

[DEENÁR.]

102.

المنصور
بالله على الامام
الحاكم بامر الله
امير المومنين

Pl. V. Purple, 1·1, Wt. 65

103.

In centre, الحاكم *El-Ḥákim*
المنصور *El-Manṣoor*
يثق بالله (؟) *trusts in God.*

Margin, الامام المنصور بالله الحاكم بامر الله

Pl. V. Green, 1·1, Wt. 65

104.

In centre, الحاكم
بامر الله

Margin obscure.

Pl. V. Green, 1·1, Wt. 65

105.

Similar to 104.

Fragment. Green, ·75

[DIRHEM.]

106—113.

Obv. As 84.

Rev. الامام الحاكم
بامر الله وولى
عهده

(Obv. nearly obliterated on some specimens.)

Green, ·85, Wt. 42
Green, with metallic lustre, ·85, Wt. 44
Green, ·85, Wt. 44
„ ·85, Wt. 45
„ ·8, Wt. 41
„ ·85, Wt. 46
„ ·9, Wt. 45
Green, coated with opaque brown paste, ·85, Wt. 43

114.

Obv. In centre, عدل

Margin, لا اله الا [الله محمد رسول الله] على ولى الله

Rev. الحاكم بامر الله
وولى عهده

Green, ·9, Wt. 47

115, 116.

Obv. As 114.

Rev. In centre, ◎

Margin, الحاكم بامر الله وولى عهده

Pl. V. Green, ·9, Wt. 46
Green, coated with brown paste, ·85, Wt. 45

117.

Obv. As 84.

Rev. الحاكم
بامر الله
عدل

Green, ·85, Wt. 46

118—120.

الحاكم
بامر الله

Green, ·9, Wt. 45
,, ·85, Wt. 40
Purple, ·85, Wt. 45

121.

As 118: star beneath inscription.

Yellow, ·85, Wt. 40

121a.

Same as 96.

G. C. Green, ·85, Wt. 39

[HALF-DIRHEM.]

122.

Obv., traces of same formula as on 84.

Rev. الحاكـــم
بامر اللـه
وولى عهده

Green, ·65, Wt. 22

123—125.

الحاكـــم
بامـر اللـه

Brown, streaked, ·7, Wt. 22
Green, ·6, Wt. 23
Green, with lustre, ·6, Wt. 23

126, 127.

الامام الحاكم
وولى عهـــده

Pl. V. Green, ·7, Wt. 20
„ ·65, Wt. 18

128.

ابو على
المنصور

Green, ·65, Wt. 24

129.

الامام الحاكم

Green, ·65, Wt. 23

[QUARTER-DEENÁR.]

130, 130a.

In centre, الحاكم
بامر الله

Margin illegible.

Pl. V. Brown, ·6, Wt. 16
G. C. Purple, ·55, Wt. 15

131.

As 130: no margin.

Green, ·55, Wt. 16

[QUARTER-DIRHEM.]

132.

Obv., portion of formula as 84.

Rev. as 130: no margin.

Green, ·5, Wt. 11

133.

As 126.

Green, ·55, Wt. 11

134, 134G.

Obv., portion of formula as 84.

Rev. الحاكم
وولى عهده

Green, ·55, Wt. 11
G. C. „ ·65, Wt. 18

135.

Obv., portion of formula as 84.

Rev. الحا
كم

Pl. V. Purple, ·55, Wt. 11

VII.—EḌH-ḌHÁHIR 'ALEE.

A.H. 411—427 = A.D. 1020—1035.

[DOUBLE DIRHEM.]

136.

Year 41[illegible].

Obv. مما
عمل سنة
عشر واربع
مائة

Rev. الامام الظاهر
لاعزاز دين الله
امير المومنين

Green, 1·05, Wt. 91

137.

Year 420?

Obv. مما
عمل سنة
عشرين (؟) و
. . . . . .

Rev. as 136.

Pl. V. Green, 1·0, Wt. 90

138.

Year 42*x*.

Obv. مما
عمل سنة . . . .
عشر يـــن واربـع
مائة

Rev. as 136.

Green, 1·0, Wt. 77

139.

Obv. as 84 : rev. as 136.

Green, 1·05, Wt. 91

140, 141.

Same as 136 : but no obv. inscription.

Brown, 1·1, Wt. 90
Green, 1·05, Wt. 91

142.

Obv. obliterated.

Rev. الامام
الـظـاهـر لاعـــزاز
دين الله امير المو
منـيـن

Yellow, 1·15, Wt. 91

143, 144.

Same as 139 : but rev. differently divided, and blundered and obscure.

Green, 1·05, Wt. 91
Green, metallic lustre, 1·0, Wt. 86

145, 145a.

الظاهر

لاعزاز دين الله

Pl. V. Green, 1·05, Wt. 83

G. C. Green, 1·05, Wt. 93

[DEENÁR.]

146.

Year 4xx.

Obv Centre, الامام الظاهـــر
لاعزاز دين الله
امير المومنيـــن

Margin, لا اله الا الله وحده لا شريك له محمد رسول
الله على ولى الله

Rev. Centre, عـــدل

Margin اربعة مائة . . . . . .

Pl. V. Green, 1·0, Wt. 66

147.

Year 415.

Same as 146: obv. margin defective.

Rev. margin, سنة خمس عشر واربعمائة

Opaque Brown, 1·0, Wt. 65

148.

Obv. Same as 146: rev. different but obscure.

Chipped. Green, ·95, Wt. 50

149.

Same as 146, but margin imperfect ; no rev. inscr.

Green, 1·1, Wt 66

150.

Same as 147, so far as preserved.

Green, fragment, 1·25

[DIRHEM.]

151—153.

Year 415 or 425.

Obv. الامام الظاهر
لاعزاز دين الله
امير المومنين

Rev. Centre, عدل

Margin, سنة خمس . . . . . عمانة

Pl. V. Green, ·9, Wt. 45
„ ·8, Wt. 46
„ ·9, Wt. 46

154, 155.

Same as 151 : rev. almost obliterated.

Green, ·85, Wt. 45
„ ·85, Wt. 46

156, 157.

Year 412.

Obv. As 151 (but 156 has الظ [*sic*].)

Rev سنة اثن [*sic*] عـ . .
واربـــع مـــا[ة

Green, ·85, Wt. 47
„ ·95, Wt. 46

158—161.

Same as 151: but reverse plain.

Green, ·9, Wt. 46
„ ·8, Wt. 44
„ ·9, Wt. 45
Purple, ·8, Wt. 46

162, 163.

×
. الامام .
الـــظاهر لاعـزاز
× ديـن الله ×
· × ·

Pl. V. Green, ·8, Wt. 46
„ ·85, Wt. 46

164.

Obv. . الامام .
الـــظـــاهر لاعـزاز
دين الله امير المو
. منين .

Traces of inscr. on reverse.

Green, ·8, Wt. 45

165.

الظاهر
لاعزاز دين الله
امير المومنين

Pl. V. Green, ·9, Wt. 46

165*a*.

الامام الظاهر
لاعزاز دين الله
امير المومنين

Rev. obscure.

G. C. Green, ·85 Wt. 46

166, 166*d*, 166*e*.

الظاهر
لاعزاز دين الله

Yellow, ·95, Wt. 46
Pl. V. Green, ·9, Wt. 46
Purple, ·9, Wt. 46

166*a*.

Same as 166.

G. C. Green, ·9, Wt. 29

[HALF-DIRHEM.]

167.

Obv. الامام
الظاهر

Rev. obscure.

Pl. V. Green, ·65, Wt. 23

168, 169.

Same as 167; but no points, and reverse plain.

Purple, ·7, Wt. 23
Green, ·7, Wt. 22

170.

Obv. الظاهر

Traces of rev. inser.

Pl. V. Yellow, ·7, Wt. 23

171, 171G.

الظاهر

Pl. V. Green, ·65, Wt. 21
G. C. „ ·6, Wt. 23

172.

الامام الظاهـــر
لاعزاز دين الله
امير المومنين

Green, ·65, Wt. 17

[QUARTER-DIRHEM.]

173, 174.

الامـــام
الظاهر

Pl. V. Green, ·55, Wt. 11
„ ·55, Wt. 11

175.

الامام الظا (*sic*)

Portion of dotted border on reverse.

Green, ·5, Wt. 11

176.

o o
الظاهر
o o

Traces of inscription on rev.

Pl. V. Brown, ·6, Wt. 11

176G.

As 170: no rev. inscription.

G. C. Green, ·6, Wt. 10

176G*.

As 173: but no pellets.

Traces of inscr. on rev.

G. C. Brown, ·55, Wt. 12

VIII.—EL-MUSTANṢIR MA'ADD.

A.H. 427—487 = A.D. 1035—1094.

[DOUBLE DEENÁRS.]

177—179.

الامام معد ابـــو
تميم المستنصر بالله
امير المـومنيـــن

Above, ornament.

Pl. VI. Brown, 1·25, Wt. 131
,, 1·25, Wt. 132
Green, 1·25, Wt. 132

180.

Centre, امير
المومنين

Margin, الامام معد ابو تميم المستنصر بالله

Brown, 1·3, Wt. 131

181.

Same as 180: but امير added to margin, and in centre,

المومنين

Pl. VI. Green, 1·3, Wt. 118

[DOUBLE DIRHEMS.]

182.

Year 428.

الامـــام
معـد ابـــو تميـم
المستنصـر باللـــه
امير المومنين سنة
ثمان و عشرين وار
بعمـانة

Pl. VI. Purple, 1·1, Wt. 92

183.

Year 450.

Obv. الامام معد ابـــو
تميم المستنصر با
لله امير المومنين

Rev. سنة
خمسين
واربعمانة

Pink, 1·0, Wt. 81

184.

Year 474.

Obv. Margin, الامام معد ابو تميم المستنصر بالله

Centre, امـير
المومنين

Rev. سنة اربـــع
وسبعين وا
ربـــع مانة

Blue, 1·05, Wt. 80

185.

Year 476.

As 184 : but rev.

سنـــة ست
و سبعين وار
بعمانة

Pl. VI. Green, 1·1, Wt. 92

186.

Year 479.

Same as 184 : but امير in margin, and only المومنين in centre ; and rev. سنة تسع
وسبعين و
اربعمائة

Yellow, 1·15, Wt. 92

187, 188.

Year obscure.

Same as 184 : but rev. inscription obscure, arranged in marginal form round central مائة

Green, 1·1, Wt. 86
Purple, 1·1, Wt. 80

189, 189G, 189H.

No year.

Same as 184 : but no rev. inscription.

Brown, coated with paste of metallic lustre, 1·1, Wt. 90
G.C. Opaque Black, splashed with White and Green, 1·1, Wt. 90
G. C. امير المومنين in one line. Green, 1·15, Wt. 91

190, 191.

معد

الامام ابو تميم

المستنصر بالله

امير المومنين

Pl. VI. Blue, 1·1, Wt. 92
Green, 1·1, Wt. 91

192—197, 197G, 197H.

الامام معد ابو

تميم المستنصر با

لله امير المومنين

Pl. VI. Green, 1·0, Wt. 92
Green, 1·05, Wt. 93
Green, 1·05, Wt. 92
Blue, 1·0, Wt. 92
Green, 1·05, Wt. 84
(Fragment) Brown, 1·0
G. C. Green, 1·05, Wt. 89
G. C. Green (Lustre), 1·05, Wt. 86

198, 199.

الامام

معد ابو تميم

المستنصر

(Blundered.)

Pl. VI. Yellow, 1·0, Wt. 92
Green, 1·0, Wt. 84

[DEENÁR].

200.

Same as 184: but no reverse.

Pl. VI. Yellow, 1·1, Wt. 66

201, 201G.

Same as 186: but reverse illegible,

and ∴ ∪ ∴ above and below المومنين

∴ ∩ ∴

Green, 1·0, Wt. 65

(Ornaments obscure: rev. plain.) G. C. Purple, 1·1, Wt. 60

[DIRHEM.]

202—214, 214G.

Same as 184: but no reverse inscr.

Pl. VI. Yellow, ·95, Wt. 46

„ ·85, Wt. 46

Purple, ·95, Wt. 46

Brown, splashed with white and gold, ·95, Wt. 46

Inscr. imperfect. Yellow, ·9, Wt. 45

Green, 1·0, Wt. 46

„ ·9, Wt. 46

„ ·95, Wt. 46

„ 1·0, Wt. 42

„ ·95, Wt. 41

Blue, ·9, Wt. 47

Yellow, with metallic lustre, ·95, Wt. 47

Opaque Black, ·97, Wt. 46

G. C. Green, 1·0, Wt. 46

215.

Traces of year.

Same as 184: but rev.,

. . . . . سـ

. . . . واربعـ

. د بعمـا

Fragment, Green, ·9

216.

Same as 186: but reverse inscr. illegible.

∪ over المومنين

Yellow, metallic lustre, 1·0, Wt. 43

217, 218.

Year 428.

الامام
معد ابو تميم
المستنصر بالله
امير المومنين سنة
ثمان وعشرين و
اربعمائة

Pl. VI. Green, ·95, Wt. 40
„ ·9, Wt. 46

219.

Year 42x.

Obv. same as 217 : but ending at المومنين

Rev. سنة (؟) عشر
. . واربع
مائة

Pl. VI. Green, ·9, Wt. 46

220—227, 227G.

الامام معد ابو
تميم المستنصر با
لله امير المومنين

Pl. VI. Blue, ·9, Wt. 45
Green, ·9, Wt. 45
„ ·9, Wt. 45
„ ·9, Wt. 41
„ ·9, Wt. 45
„ ·9, Wt. 36
„ ·9, Wt. 37
„ ·9, Wt. 32
G. C. „ ·9, Wt. 47

228.

الامام ابو تم
يم المستنصر بالله
امير المومنين

Pl. VI. Blue, ·9, Wt. 47

[HALF-DIRHEM.]

229—233, 233a.

بالله
المستنصر
امير المومنين

Pl. VI. Brown, ·75, Wt. 23
Yellow, ·7, Wt. 23
,, ·7, Wt. 23
Green, ·8, Wt. 23
,, ·7, Wt. 22
G. C. ,, ·7, Wt. 20

234, 234a.

المستنصر
بالله

Green, ·7, Wt. 23
G. C. Yellow, ·7, Wt. 22

235.

بالله
المستنصر

Pink, ·75, Wt. 23

236.

المستنصر

Pl. VI. Opaque White, ·65, Wt. 23

236G.

الامـــام

مـــعـــد

G. C. Brown, ·65, Wt. 22

237.

معد [الامام] arranged in circle round central point.

Yellow, ·65, Wt. 23

237G.

In centre, امير

المومنين

Margin, ... الامام المستنصر ....

G. C. Purple, ·6, Wt. 16

[QUARTER-DIRHEM.]

238, 239.

المستنصر

بـالـلـــه

Pl. VI. Green, ·6, Wt. 11

,, ·6, Wt. 11

240—245, 245G.

الامـــام

مـــعـــد

Pl. VI. Blue, ·55, Wt. 11

Yellow, ·55, Wt. 11

Green, ·6, Wt. 11

,, ·55, Wt. 11

Blue, ·55, Wt. 12

Yellow, ·55, Wt. 12

G. C. Green, ·55, Wt. 11

246, 246a.

معـد
الامـام

Pl. VI. Green, ·6, Wt. 11
G. C. ,, ·55, Wt. 11

247, 248.

معد الامام in circle round inner circle, point in centre.

Green, ·55, Wt. 12
,, ·55, Wt. 10

249, 250.

Same as 240.

Green, ·5, Wt. 8
,, ·55, Wt. 6

251—277.

In addition to the legible examples of El-Mustanṣir's glass coin-weights, the Collection contains twenty-seven pieces, none of which is legible, but all have the general appearance of this Khaleefeh's weights.

IX.—EL-MUSTA'LEE AḤMAD.

A.H. 487—495 = A.D. 1094—1101.

[DOUBLE-DIRHEM.]

278, 279.

Margin, الامام ابو القاسم المستعلى بالله

Centre, امير المومنين

Pl. VII. Blue, 1·1, Wt. 92
Green, 1·1, Wt. 92

280, 281.

احمد
الامـــــام
المستعلى بالله
امير المومنين

Pl. VII. Green, 1·0, Wt. 91
Brown, 1·0, Wt. 92

282—285.

الامـــام
احمـــد

Pl. VII. Opaque Grey, splashed with Blue, 1·05, Wt. 92
Opaque Green, ·95, Wt. 92
Opaque Grey and Brown, ·95, Wt. 92
(Inscr. nearly obliterated.) Opaque Green, ·95, Wt. 83

[DEENÁR.]

286.

Same as 280.

(*Broken.*) Blue, 1·0, Wt. 64

[DIRHEM.]

287.

احمد
الامام احمد
المستعلى بالله
امير المومنين

Blue, ·95, Wt. 47

288.

Same as 278.

Pl. VII. Yellow, ·9, Wt. 46

289, 290.

Probably same as 278, but obscure.

Green, ·9, Wt. 46
,, ·95, Wt. 45

290a.

Same as 280.

G.C. Brown, ·9, Wt. 45

291, 292.

الامـــام
احمـــد

Opaque Grey, ·85, Wt. 47
,, Brown, ·8, Wt. 40

[HALF-DIRHEM.]

293—295.

الامـــام
احمـــد

Pl. VII. Green, ·65, Wt. 24
,, ·55, Wt. 21
Blue, ·6, Wt. 21

296, 297

احمـــد

الامـــام

Yellowish White, ·7, Wt. 23
Green, ·7, Wt. 22

298.

احمـــد

Green, ·65, Wt. 23

X.—EL-ÁMIR EL-MANṢOOR.

A.H. 495—524=A.D. 1101—1130.

[DOUBLE DEENÁR.]

299.

المنصور

ابـوُ على الامام

الامر باحكام الله

امیـــر المومنين

Opaque Blue splashed with gold, 1·2, Wt. 130

[DOUBLE DIRHEM.]

300

الامـام

الامر باحكـا

م الله امير

المومنين

Pl. VII. Green, 1·1, Wt. 94

301.

الامـــام
المنـــصور
امـيـــر المو (*sic*)

Pl. VII. Green, 1·1, Wt 90
„ 1·1, Wt. 91

302.

الامـــام
المنصور

Green, ·95, Wt. 90

[DEENÁR.]

303.

Centre, الامـــام
المنصور

Margin, ابو على الامر باحكام الله امير المومنين

Pl. VII. Blue, 1·05, Wt. 66

[DIRHEM.]

304, 305.

Centre, الله ؟
م

Inner margin, ابو على المنصور الامر باحكا

Outer margin illegible.

Brown, ·95, Wt. 47
Blue, ·9, Wt. 46

306.

Centre, الامـــام
المـنصور

Margin, ابو على الامر باحكام لله (*sic*) امير المومنين

Green, ·9, Wt. 50

307.

الامـــام
المنصور ابو على
الامـر باحـكـــام
الـلـه امـيـر المـو (*sic*)

Green, ·9, Wt. 46

308.

المنصور ابو على
لامر (*sic*) باحكام
الله اميـــر المو (*sic*)

Green, 1·0, Wt. 47

309.

الامـــام
الامـر باحكـا
م الـــلـه امير
المومنين

Pl. VII. Green, ·9, Wt. 47

310.

الامـــام
الامر باحكـام
الله اميـــر ه (*sic*)

Green, ·95, Wt. 46

[HALF-DIRHEM.]

311, 312.

الامـــــام

الامـــــر

Pl. VII. White, ·65, Wt. 22
,, ·65, Wt. 22

312*a*.

Centre, الامـــام

المنصو
ر

Margin illegible.

Green, ·6, Wt. 17

[QUARTER-DIRHEM.]

313.

Same as 311.

White, gilt, ·5, Wt. 11

XI.—EL-HÁFIḌH.

A H. 524—544=A.D. 1130—1149.

[DOUBLE DEENÁR.]

314.

الامـــام

الحافظ لدين

اللـــه امـــير

المومنين

Pl. VII. Opaque Black, 1·2, Wt. 126

315.

[DOUBLE DIRHEM.]

الامـــام
الحافـــظ لد
ين الله

Pl. VII. Yellow, 1·15, Wt. 92.

[DIRHEM.]

316.

الامـــام
الحـــافظ

Opaque White, ·8, Wt. 44

[HALF-DIRHEM.]

317—319.

Same as 316.

Pl. VII. Green, ·65, Wt. 23
,, ·65, Wt. 22
,, ·65, Wt. 21

[QUARTER-DEENÁR.]

320—322.

الامـــام
الحافظ لد[ين
الله امير
المومنين

Pl. VII. Opaque Blue, ·6, Wt. 16
,, ,, ·6, Wt. 15
,, ,, ·5, Wt. 14

VII.—EḌH-ḌHÁFIR ISMÁ'EEL.

A.H. 544—549=A.D. 1149—1154.

[DOUBLE DEENÁR?]

322G.

الامـــام

(*sic*) الظافر بمرالله

امير المومنين

G. C. Opaque Red, 1·2, Wt. 116

[DOUBLE DIRHEM.]

323, 324.

الامـــام

الظافـــر

Opaque Grey, 1·0, Wt. 90

„ „ 1·0, Wt. 92

[DIRHEM.]

325, 326.

Same as 323.

Pl. VII. Opaque Grey, ·85, Wt. 46

„ „ ·9, Wt. 46

[HALF-DIRHEM.]

327, 328.

Same as 323.

Opaque Grey, ·65, Wt. 22

„ „ ·55, Wt. 22

XIII.—EL-FÁÏZ 'EESÁ.

A.H. 549—555 = A.D. 1154—1160.

[DOUBLE DEENÁR.]

329.

الامـــام

الفـائز بنصر

الله امير

المـومنيـن

Pl. VII. Opaque Green, 1·2, Wt. 131

[DOUBLE DIRHEM.]

330, 330*a*, 330*b*.

الله

الامام الفائز

بنصر

Pl. VII. Opaque Grey, ·95, Wt. 90
„ „ 1·0, Wt. 89
„ „ ·95, Wt. 91

[DIRHEM.]

331.

Same as 330.

Opaque Grey, ·8, Wt. 46

XIV.—EL-'ÁDID 'ABD-ALLAH.

A.H. 555—567=A.D. 1160—1171.

[DOUBLE DEENÁR.]

332.

الامـــام
العـاضـــد
لدين الله

Pl. VII. Opaque Green, 1·2, Wt. 132

[DOUBLE DIRHEM.]

333.

Same as 332.

Opaque Grey, ·95, Wt. 92

334.

الله
الامـــام
العـاضـد
لدين

Opaque Green, 1·0, Wt. 90

[DIRHEM.]

335.

Same as 332.

Opaque Grey, ·8, Wt. 46

[HALF-DIRHEM.]

336.

الامـــام
العـاضـد

Pl. VII. Opaque Green, ·65, Wt. 22

V.—LATER ISSUES.

V.—LATER ISSUES.*

OF THE PERIOD OF THE MEMLOOK SULṬÁNS, &c.

'ALEE ESH-SHUWEYKH.

337.

Year *x*70.

على ا
لشويخ سنة
سبعين و

Pl. VIII. Yellow (yellow splash), 1·05, Wt. 92

338, 338G.

Year *x*83.

على
الشويخ سنة ثلث
و ثمانين

Yellow (blue splash), 1·05, Wt. 93
G. C. Blue, 1·0, Wt. 92

339, 339G.

على يخ
الشو

Yellow (blue splash) 1·05, Wt. 93
G. C. „ „ 1·1, Wt. 94

340.

Same as 338.

Purple, ·9, Wt. 46

* The metrology of the Memlook period is so variable that it has not been considered desirable to hazard any identifications of the intended weights. At the same time it may be noted that there is a general average of weights of 93, 47, and 23 grs., which appear to represent double dirhems, dirhems and half dirhems.

341, 341a.

Same as 339.

Yellow (blue splash), ·8, Wt. 44
G. C. White „ „ ·9, Wt. 48

'ALEE EL-MIṢREE.

342, 343, 344.

Year 796?

علی
المصری
ستة و تع (*sic*)
وسعمة

(possibly وسبعين)

Pl. VIII. Green (blue splash), 1·0, Wt. 92
Yellow, ·9, Wt. 47
„ ·85, Wt. 41

'ALEE ED-DA'EE.

345.

Within square, علـــی
الدعـــی

Pl. VIII. Yellow, 1·1, Wt. 94

346.

Same, but الداعی

Purple, ·9, Wt. 44

MOḤAMMAD EL-'OODEEP

347.

Year .e50.

محمد

العو ى

د

سنة

خمسين

(حمسين dotted thus)

Pl. VIII. Purple, 1·1, Wt. 91

348, 349, 350.

Same: dates blundered or illegible.

Purple, 1·1, Wt. 91
„ 1·1, Wt. 93
„ 1·05, Wt. 93

351.

Same as 347.

Purple, ·85, Wt. 38

352.

Same as 347.

Purple, ·85, Wt. 46

352a.

Year *xx*7.

ى

العـــود

ســـبـــع

سنة

G. C. Opaque Black and White, ·85, Wt. 47

353.

العـــودى

. . . .

(Fragment) Blue.

MOḤAMMAD EL-BÁBÁ IBN MOḤAMMAD.

354.

Within sevenfoil, محمد البابا بن

محمد

Pl. VIII. Yellow, 1·05, Wt. 93

355.

Same.

Yellow (green splash), ·85, Wt. 47

EL-BÁBÁ.

356.

Within cusped hexagram, البابا

Stars outside.

Yellow (blue splash), 1·0, Wt. 83

357.

Within hexagram, البابا

Yellow (brown splash), ·9, Wt. 47

358.

Same as 357.

Yellow, ·65, Wt. 23

BÁBÁ.

359.

Within hexagram, بابا

Green, 1·05, Wt. 93

360.

Same as 359.

Blue, ·9, Wt. 47

361.

Same as 359.

Opaque Black, ·6, Wt. 23

'OMAR.

360—364, 364G.

عـــمـــل

عـــمـــر

Pl. VIII. Opaque Black, striped with white, 1·0, Wt. 93
Purple, 1·0, Wt. 92
Dividing line. Opaque Black, 1·0, Wt. 92
Opaque Green, 1·0, Wt. 89
Purple, ·95, Wt. 80
G. C. „ 1·0, Wt. 89

AḤMAD.

365.

احـــمـــد

احـــمـــد

(Ineuse.)

Pl. VIII. Green, ·9, Wt. 45

366.

Year *x*42.

In centre, احمد

Around, سنة اثنى واربعين

Purple, ·85, Wt. 43

367, 368.

Year *x*25.

Same: but . . . . . سنة خمس وعشرين و

Green, ·85, Wt. 47
Pink, ·85, Wt. 47

UNCERTAIN.

369.

Year *x*27.

In centre, محره

Around, . . . سنة سبع وعشرين

Yellow (blue splash), ·9, Wt. 47

HASAN.

370.

حسن
عمل

Pl. VIII. Blue (white and blue surface), ·85, Wt. 46

371.

عمل
حسن

Blue, ·65, Wt. 23

RAMADAN?

372, 373.

رمضن
قدر

Pl. VIII. Green, ·85, Wt. 48
„ ·8, Wt. 46

YA'ḲOOB.

374.

Year *x*36.

يعقوب
ستة و
ثلاثين

Pl. VIII. Brown, ·9, Wt. 46

375, 375*a*.

Year *x*50 or *x*56.

صح ؟

يعـــقـــوب

سنة (or ستة)

خمسين

Brown, ·8, Wt. 46
Yellow (purple spot), ·85, Wt. 46

EL-JEMÁLEE.

376.

نســـل ؟

الجمالى

Pl. VIII. Yellow, ·9, Wt 49

MOḤAMMAD.

376*a*.

Year *x*71?

Centre, محمد

Margin, سنة احدى (؟) و سبعين ؟

G. C. Pink, 1·3, Wt. 135

'ABD-ALLÁH 'OMAR.

377.

الله
عبد
عمر

Purple, ·85, Wt. 46

EL-FAḲEEH 'OMAR.

378.

الفقيه
عمر

(With diacritical points.)

Pl. VIII. Purple, ·8, Wt. 40

EL-MUSHARRAF?

379.

المشرف الر ...

(Thus pointed.)

Yellow, ·9, Wt. 43

AḤMAD.

380.

محمد ؟

احمـــد

؟ حمد

Pl. VIII. Green, ·5, Wt. 13

FARAJ ?

381.

عمـــل

فـــرج ؟

Purple, ·8, Wt. 38

MOḤAMMAD.

382.

Within triangle, محمـــد

Green, 1·05, Wt. 93

ABOO-BEKR.

383.

Year 737.

بو بكر

سبع وثلا[ثي]ن

Opaque Black, 1·0, Wt. 90

EL-MES'OODEE AḤMAD.

384.

In centre, احمد

Margin, عمل برسم المسعودى

Pl. VIII. Purple, 1·25, Wt. 134

SHÁHEEN GIRAI.

385.

ح وا.

شاهين كر

ى

Pl. VIII. Green, 1·15, Wt. 94

MOḤAMMAD IBN SHÁHEEN.

386.

Year *x*28.

محمد بن

شاهين

ثمان عشرين

سنة

Pl. VIII. Yellow, 1·05, Wt. 93

387.

Year *x*29.

Same : but (*sic*) تسع وعشرين انا

Yellow (blue splash), 1·0, Wt. 93

388.

Same : date obscure.

Green, 1·05, Wt. 94

389.

Same : date obliterated.

Green (coated with metallic paste), 1·05, Wt. 85

390.

Same as 388.

Yellow (blue splash), ·8, Wt. 47

VI.—WITHOUT NAMES.

VI.—WITHOUT NAMES.

391.

بالله *By God*
استحرب *I am ready to fight.*
تعالى *the most High,*

Pl. VIII. Brown, 1·0, Wt. 92

392.

(*sic*) الله [*To*] *God* [*belongeth*]
العزة *power.*

Pl. VIII. Green, ·7, Wt. 23

393, 394.

الله *God*
انصر *grant victory.*

Pl. VIII. Green, ·65, Wt. 25
Purple, ·65, Wt. 19

395.

In centre, امير *Prince*
المومنين *of the Faithful.*

Margin obliterated.

Yellow, ·55, Wt. 15

396.

عدل *Just.*

Pink, ·5, Wt. 11

VII.—WITH DEVICES ONLY.

VII.—WITH DEVICES ONLY.

397.

Whorl.

Blue, 1·2, Wt. 171

398—400.

Lion to left.

Opaque Black, ·8, Wt. 47
Blue, ·85, Wt. 65
Purple, 1·0, Wt. 91

401—402*a*.

Ornamented interlaced hexagram.

Yellow, 1·05, Wt. 94
„ 1·05, Wt. 90
„ ·8, Wt. 46

403—415, 415*c*.

Hexagram, usually with central point.

Yellow, 1·0, Wt. 87
Green, with white marks, ·85, Wt. 46
Opaque Black, ·95, Wt. 91
„ „ 1·0, Wt. 91
Purple, ·8, Wt. 48
„ ·8, Wt. 44
Opaque Black, 1·15, Wt. 94
(Broken) „ „ 1·0
„ „ 1·0, Wt. 87
Brown, metallic lustre, ·9, Wt. 45
Purple, ·85, Wt. 45
„ ·6, Wt. 21
„ ·6, Wt. 16
G. C. Yellow, ·85, Wt. 46

416—418G, 419.

Hexagram with central annulet.

Grey, ·85, Wt. 44
Purple, ·85, Wt. 45
Opaque Black, ·8, Wt. 45
G. C. „ „ ·85, Wt. 47
Purple, ·65, Wt. 23

420, 420G.

Hexagram, plain centre.

Purple, with white stripes, ·7, Wt. 23
G. C. Opaque Black, 1·05, Wt. 88

421.

Blue, ·85, Wt. 67

422—425.

Flower of six petals.

Opaque Black, ·95, Wt. 92
Purple, ·95, Wt. 56
„ ·6, Wt. 24
Blue, ·65, Wt. 24

426.

Diamond or lozenge.

Green, brown splashes, ·6, Wt. 19

427.

Square within square; central point; around, ornaments.

Opaque Blue, ·5, Wt. 11

427G.

G. C. Green, ·9, Wt. 90

428—432.

Crossed lines (grill).

Opaque Black, 1·05, Wt. 90
Brown, 1·05, Wt. 92
Opaque Green, ·85, Wt. 49
Brown, ·7, Wt. 24
Grey, ·9, Wt. 46

433.

Green, ·75, Wt. 22

434.

Similar, irregular.

Green, ·9, Wt. 90

435.

Point within circle, surrounded by dots.

Opaque Red, ·6, Wt. 22

436—441.

With central hole.

Brown, ·85, Wt. 67
Opaque Blue and Green, ·7, Wt. 40
(With Green bead in hole). Yellow, ·65, Wt. 29
„ ·65, Wt. 30
Opaque Red and Blue, ·7, Wt. 32
Brown, ·8, Wt. 46

442—444.

With central deep hollow.

Opaque Blue, 1·15, Wt. 226
Green, 1·0, Wt. 138
Yellow, blue and white splash, ·9, Wt. 130

445—449.

With slight hollow.

Opaque Black, ·35, Wt. 7
Brown, ·45, Wt. 12
Purple, ·45, Wt. 12
„ ·45, Wt. 12
Blue, ·4, Wt. 7

450, 451.

With central boss.

Green, ·95, Wt. 78
Yellow, ·95, Wt. 64

452, 453.

Plain.

Opaque Green, 1·0, Wt. 115
Blue, ·55, Wt. 11

454.

Inscription or ornament within square.

Green, blue and white splash, 1·8, Wt. 902

VIII.—BOTTLE-STAMPS.

GLASS BOTTLE-STAMPS.*

'ABD-EL-MELIK IBN MARWÁN.

HALF-ḲIST.

391.

بسم الله	*In God's name:*
ا]مـــر الله بـــالو	*God commands hones-*
فـــا وامـــر اه . .	*ty; And ordered the Ameer*
عبد الملك بن م[روا	*'Abd-El-Melik ibn M[arwá-*
ن بـطـبـعـه نـصـف	*n the stamping of it, half*
قـسـط و	*a ḳist. Full*
اف	*measure.*

Pl. IX. G. C. Green, 1·7

* Of other specimens in the Glass Collection, one is stamped with the numeral ٢ (2); another with ح; and a third bears the representation of a figure seated cross-legged, wearing a turban, and holding a bottle in his right hand and a wine-cup in his left, enclosed in a circle of dots. A hollow glass cylinder, closed at ends, weighs 4900 grs., and may be meant for a pound (*raṭl*) weight; a glass ring weighs 3000 grs.; and a square block with hole in centre 1460 grs.

'OBEYD-ALLAH IBN EL-ḤABḤÁB.*

Treasurer of Egypt, A.H. 102—114 = A.D. 720—732.

(UNDER WHOM IBN MEYSARAH.)

QUARTER-ḲIST.

392.

Year 111.

بسم الله	*In God's name :*
امر عبيد الله	*Ordered 'Obeyd-Allah*
بن الحبحاب ربع	*ibn El-Ḥabḥáb a quarter*
قسط على يدى حا	*ḳist, by the hands of . .*
ه بن ميسره سنة	*. ibn Meysarah, year*
احدى عشرة	*one ten*
مئة	*hundred.*

Pl. IX. G. C. Green, 1·75

'EESA IBN ABEE-'AṬÁ.†

Treasurer of Egypt, A.H. 125—132 = A.D. 743—750.

HALF . . . KEYLEH?

393.

بسم الله	*In God's name :*
امر الله بالوفا	*God commands honesty :*
امر الامير عيسى	*ordered the Ameer 'Eesá*
بن ابى عطا نصف	*ibn Abee-'Aṭá half*
. . كيلة واف	*. . Keyleh. Full measure.*

. . . .

Pl. IX. G. C. Green, 1·4

* See above, p. 4, nos. 3, 3G, and Introduction.

† See above, p. 6, no. 6.

HALF-ḲIST.

394.

ا]مر الامير	*Ordered the Ameer*
عي]سى بن ابى عط]ا	*'Eesá ibn Abee-'Aṭá*
بـ]ـطـبـعـه نـصـف	*the stamping of half*
ق]سط واف	*a ḳist : full measure.*

Pl. IX. G. C. Green, 1·4

ḤOSEYN IBN 'ALEE.

395.

عـمـــل	*Work of*
حـسـيـن	*Ḥoseyn*
بن علی	*ibn 'Alee.*

Pl. IX. G. C. Yellow, 1·05

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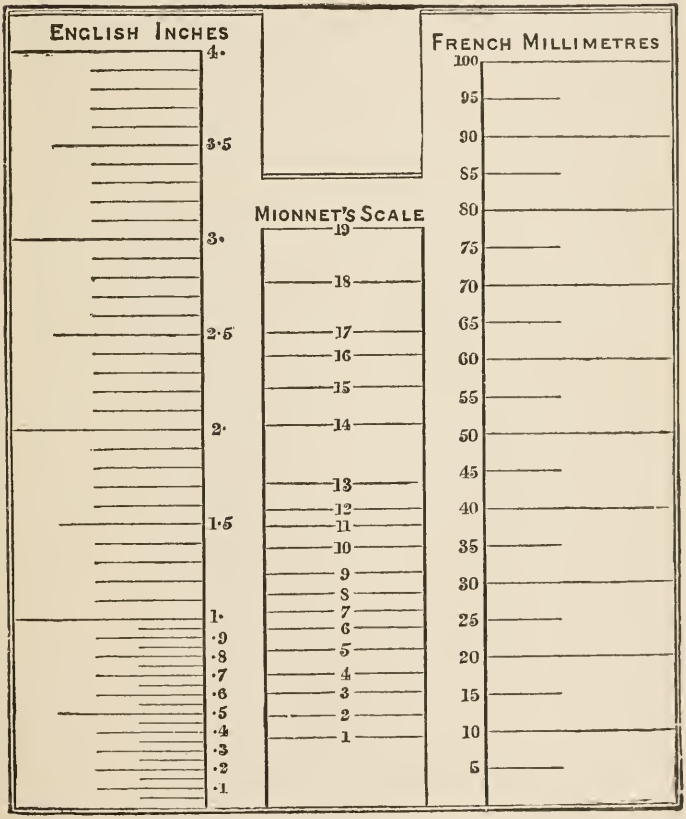

TABLE

OF THE

RELATIVE WEIGHTS OF

ENGLISH GRAINS and FRENCH GRAMMES.

Grains	Grammes.	Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
1	·064	41	2·656	81	5·248	121	7·840
2	·129	42	2·720	82	5·312	122	7·905
3	·194	43	2·785	83	5·378	123	7·970
4	·259	44	2·850	84	5·442	124	8·035
5	·324	45	2·915	85	5·508	125	8·100
6	·388	46	2·980	86	5·572	126	8·164
7	·453	47	3·045	87	5·637	127	8·229
8	·518	48	3·110	88	5·702	128	8·294
9	·583	49	3·175	89	5·767	129	8·359
10	·648	50	3·240	90	5·832	130	8·424
11	·712	51	3·304	91	5·896	131	8·488
12	·777	52	3·368	92	5·961	132	8·553
13	·842	53	3·434	93	6·026	133	8·618
14	·907	54	3·498	94	6·091	134	8·682
15	·972	55	3·564	95	6·156	135	8·747
16	1·036	56	3·628	96	6·220	136	8·812
17	1·101	57	3·693	97	6·285	137	8·877
18	1·166	58	3·758	98	6·350	138	8·942
19	1·231	59	3·823	99	6·415	139	9·007
20	1·296	60	3·888	100	6·480	140	9·072
21	1·360	61	3·952	101	6·544	141	9·136
22	1·425	62	4·017	102	6·609	142	9·200
23	1·490	63	4·082	103	6·674	143	9·265
24	1·555	64	4·146	104	6·739	144	9·330
25	1·620	65	4·211	105	6·804	145	9·395
26	1·684	66	4·276	106	6·868	146	9·460
27	1·749	67	4·341	107	6·933	147	9·525
28	1·814	68	4·406	108	6·998	148	9·590
29	1·879	69	4·471	109	7·063	149	9·655
30	1·944	70	4·536	110	7·128	150	9·720
31	2·008	71	4·600	111	7·192	151	9·784
32	2·073	72	4·665	112	7·257	152	9·848
33	2·138	73	4·729	113	7·322	153	9·914
34	2·202	74	4·794	114	7·387	154	9·978
35	2·267	75	4·859	115	7·452	155	10·044
36	2·332	76	4·924	116	7·516	156	10·108
37	2·397	77	4·989	117	7·581	157	10·173
38	2·462	78	5·054	118	7·646	158	10·238
39	2·527	79	5·119	119	7·711	159	10·303
40	2·592	80	5·184	120	7·776	160	10·368

TABLE

OF THE

RELATIVE WEIGHTS OF

ENGLISH GRAINS and FRENCH GRAMMES.

Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.	Grains.	Grammes.
161	10·432	201	13·024	241	15·616	290	18·79
162	10·497	202	13·089	242	15·680	300	19·44
163	10·562	203	13·154	243	15·745	310	20·08
164	10·626	204	13·219	244	15·810	320	20·73
165	10·691	205	13·284	245	15·875	330	21·38
166	10·756	206	13·348	246	15·940	340	22·02
167	10·821	207	13·413	247	16·005	350	22·67
168	10·886	208	13·478	248	16·070	360	23·32
169	10·951	209	13·543	249	16·135	370	23·97
170	11·016	210	13·608	250	16·200	380	24·62
171	11·080	211	13·672	251	16·264	390	25·27
172	11·145	212	13·737	252	16·328	400	25·92
173	11·209	213	13·802	253	16·394	410	26·56
174	11·274	214	13·867	254	16·458	420	27·20
175	11·339	215	13·932	255	16·524	430	27·85
176	11·404	216	13·996	256	16·588	440	28·50
177	11·469	217	14·061	257	16·653	450	29·15
178	11·534	218	14·126	258	16·718	460	29·80
179	11·599	219	14·191	259	16·783	470	30·45
180	11·664	220	14·256	260	16·848	480	31·10
181	11·728	221	14·320	261	16·912	490	31·75
182	11·792	222	14·385	262	16·977	500	32·40
183	11·858	223	14·450	263	17·042	510	33·04
184	11·922	224	14·515	264	17·106	520	33·68
185	11·988	225	14·580	265	17·171	530	34·34
186	12·052	226	14·644	266	17·236	540	34·98
187	12·117	227	14·709	267	17·301	550	35·64
188	12·182	228	14·774	268	17·366	560	36·28
189	12·247	229	14·839	269	17·431	570	36·93
190	12·312	230	14·904	270	17·496	580	37·58
191	12·376	231	14·968	271	17·560	590	38·23
192	12·441	232	15·033	272	17·625	600	38·88
193	12·506	233	15·098	273	17·689	700	45·36
194	12·571	234	15·162	274	17·754	800	51·84
195	12·636	235	15·227	275	17·819	900	58·32
196	12·700	236	15·292	276	17·884	1000	64·80
197	12·765	237	15·357	277	17·949	2000	129·60
198	12·830	238	15·422	278	18·014	3000	194·40
199	12·895	239	15·487	279	18·079	4000	259·20
200	12·960	240	15·552	280	18·144	5000	324·00

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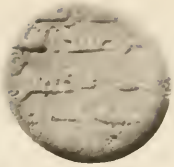
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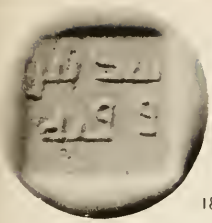

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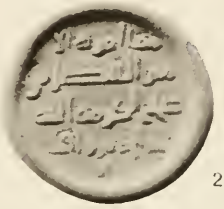

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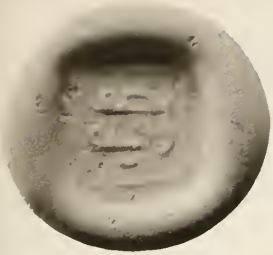

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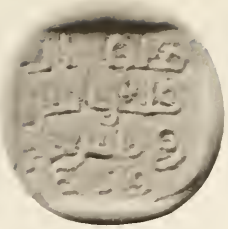

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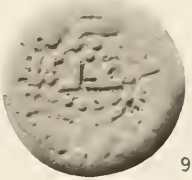

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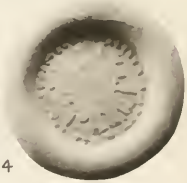

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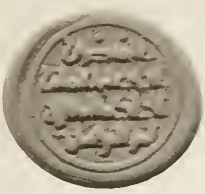
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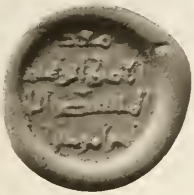
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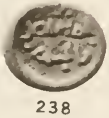
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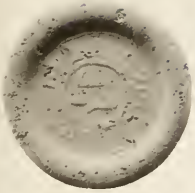
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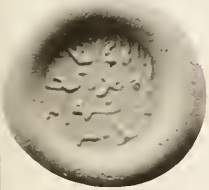
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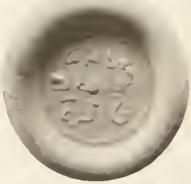
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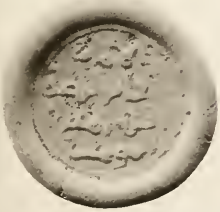
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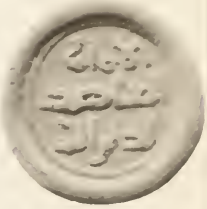
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